

THE EDUCATION OF  
CHILDREN UNDER SEVEN

ALSO BY MARY STURT  
*The Psychology of Time*

WITH ELLEN OAKDEN  
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*Practical Ethics: A Sketch of the*  
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# The Education of Children under Seven

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Something there is that doesn't love a wall



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## INTRODUCTION

THE teacher of young children has a problem different in kind, rather than in degree, from that of her colleague who instructs children above the age of seven or eight. The little child is engaged in making its adjustment to the physical world about him and in gaining mastery over his own powers, the older child during school hours is being made free of a spiritual world, and being taught how to move about in a realm of thought that only touches his experienced universe at certain points. An example will make this clear. A baby exploring its own garden path, turning over pebbles and sand and modelling mud pies is studying geography so far as it affects himself. All is concrete and immediate. The boy or girl in an upper standard is asked to pass imaginatively to the remote in space, and take an interest in the products of China or the climate of Mount Everest. This is a very great change ; and, though the distinction is often obscured by the introduction of much practical work for children of thirteen or fourteen, and though even babies are tempted into realms of thought by fairy tales, the fundamental distinction remains firm. This change in subject matter is even an essential part of the progress of education. Of all the main characteristics of

the educated man none is more important than this power of mental travelling ; and there is no greater gift that education can bestow. Our lives bounded by the immediate would be intolerable. We should be immured in the cruellest prison. We must get our magic carpets and pass over time, space and actuality, to sojourn, if only for an hour, with heroes of old or in the palaces of enchanted princesses. This gift, however, is not for the very young. In spite of all the talk of a child's imagination, their real powers in this respect are very small. A child under three can hardly appreciate even the simplest fairy story, and will interrupt the tale of the *Three Little Pigs* with a comment grotesquely practical and alien to the spirit of the story. So too, an elder child of six or seven will fail completely to grasp the condition of life in an age other than his own. Even children of ten will introduce railways or aeroplanes into an historical period that knew no motive power stronger than horses. The mind, for full development, must learn to pass beyond its surroundings, *but*, and this is the task of the Infants' Teacher, it must first learn to understand and control its surroundings.

For his excursions into the remote in time or space the adult relies on one power above all others, the power to read. This is the true enchanted carpet of the modern world, and on the wings of print we

can retravel any paths that mankind has walked. A little child is without this gift, and in consequence the Infants' Teacher, while the child is learning to read, has to rely on other means for imparting information. Thus reading comes into the work of the Infants' School in a double way. A large part of the children's time is spent in learning the art, and the work for the rest of the time is conditioned by the inability to read. The same thing is true of writing and arithmetic. The children sooner or later will learn them, and until then must be taught and kept busy with occupations that are not dependent on them.

How important this is can be seen from considering the work of older children. Johnnie, aged eleven, can at home be told to be quiet and good, and given a copy of the *Boys' Own Paper* to keep him so. In school he reads his books on History or Geography, Literature or Nature Study. He has his pages of sums and works them. He writes answers to questions and draws specimens. These tools of thought are continually in use, and without them the modern system of education would collapse. Baby Richard, aged three, must receive his teaching by methods entirely different.

It is perhaps the challenge to their ingenuity that has produced among Infants' Teachers such a high level of invention and interest. A visitor going the round of London schools could hardly fail to be

impressed by the excellence of many Infants' Departments. Not only are the buildings often very good indeed, but the enthusiasm of the teachers is obvious, and their pride in their own efforts and experiments most stimulating. The fact has been noted even beyond their own profession; and a publisher, commenting on the writers of educational books, singled out Historians and Infants' Teachers as the two classes in the community that were most ready to express themselves. But even those who do not write, seem to find an unusually satisfying outlet in their work. There may be many reasons. Few women can resist the attentions of a little child; and a woman who can enter a school and be unaffected with pleasure when an engaging baby goes up to her, takes her hand or handles her dress, is indeed hard-hearted. Again the child's utter dependence on the teacher is very flattering. Older children are continually fretting on their chain. They can read, they have the means of acquiring knowledge for themselves; they have places and purposes of their own, they wish to be away and realising them; they are conscious of their growing strength and long to test it by combat. The little child clings to the kind, inventive teacher in an adorable dependency.

Again Infants' Schools are free of a curse, which for all our efforts still afflicts the senior departments. They have no examinations. A great deal of the work

of the girls' and boys' schools is built directly round the Junior County Examinations, and to the requirements of these tests the work is largely adapted. The Infants' Schools, though there are many complaints about the demands of the people "upstairs," are really free; and determine their own methods with as much independence as this world allows.

Lastly the Infants' Teacher often recaptures from her children something of the wondering spirit of childhood. Every one knows the delight of taking a child to a toy shop or the Zoo, and seeing the tawdry bits of tin, or dejected camels become objects of beauty or romance before his eyes. The teacher of little children has the world continually revealed to her in its pristine fascination. Colours of beads or flowers, sensations of touch or smell; the wonderful property of glass that it is transparent; the delight of simple physical movement; the joy of making, all these are around her every day; and that terrible curse of middle life, the gradual passing of the marvellous into the commonplace, should be lifted from her by her wondering associates.

This book makes no claim to cover the whole field of Infants' teaching. Some highly technical subjects e.g. Physical Training have been omitted: others e.g. Music and Craft only touched on very briefly. It is concerned mainly with general principles and matters which are open to the non-specialist.



## THE NURSERY



A tiny baby is extremely helpless, and cut off from the world to a very large extent by the deficiencies of his sense-organs. The sensory capacities of a small

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baby are hard to test with exactitude. The following is an account of experiments intended to determine them:

"A large number of observations have been collected in our laboratory upon the early sensory responses of infants. If the infant's breathing and hand movements are being recorded during sensory stimulation, evidences of sensibility can be obtained. From birth the infant responds to loud voices, to the tearing of paper, and to the scraping of one object upon another. Sensibility to tuning forks and other musical instruments is not marked. Similar undifferentiated responses have been obtained by stimulating with different olfactory substances such as oil of peppermint. Most of the responses were obtained from substances which stimulate the fifth nerve, which is a tactile nerve. No very sure results have been obtained from the milder perfumes. Pinching, sticking with a pin, warm and cold objects, twisting and turning of a joint (contact and kinæsthetic) all will produce changes in respiration and in the rate, amplitude and form of the movement-curve obtained from the hands. Vision so far has been tested only with respect to the infant's ability to fixate a white light. This occurs at birth. Colour sensitivity has not been tested."<sup>1</sup>

For the first few months of a child's life the mastery of his own body is the most important thing. The senses that connect him with the outside world gradually develop: at six or seven weeks he shows signs

<sup>1</sup> Watson, "Psychology from the standpoint of a Behaviourist" p. 236.



of seeing and being interested in lights, he hears somewhat, and the tiny hands will close round your finger when the palm is touched. Later again he learns to smile, and delights his parents.

*Incipe, parve puer, risu cognoscere matrem.*

*Matri longa decem tulerunt fastidia menses.*

*Incipe, parve puer : cui non risere parentes*

*Nec deus hunc mensa, dea nec dignata cubili est.*

Still later he starts to gather strength and to control the greater muscles of the body. A great stage is passed when baby, placed on his back, can roll over ; and many are the bets taken among Indian servants as to the day on which Chota Sahib will perform the feat.

By the time a child is nine or ten months he is a recognisable human being. He looks out upon the world with seeing eyes, hears, and in part understands what is said to him, has a life and thought and character of his own. It is of course difficult to give ages that will apply to all children, but this is a description of a child of this age, who, though he is backward in powers of locomotion, seems up to the average in other ways. He cannot walk, nor crawl, and if set on the floor wriggles about but makes no effort to reach a new position. He can use his hands to hold things, and will hold and brandish quite a heavy silver mug. He eats from a spoon and loves to be given a crust to chew, which he manages to do quite creditably with the aid of four teeth. He cannot talk but makes meaningful sounds, and in the morning will sit up in bed saying dad-dad-dad to himself for a long time.

He understands his way of life and the doings of people round about him. He will lie quiet and alone

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for hours in his pram, his only amusement the contemplation of his toes, which he wedges in the meshes of the net that covers him. But when he is brought in, and set on someone's lap for an hour's amusement, he expects to be noticed continuously, and, should entertainment fail, he expresses his disapproval in a little whining squawk. He shows the greatest excitement at the indication of food, never more so than when he sees his mother squeezing an orange into a cup; for orange juice is his particular delight. If he sees you with your hat on, when he is in his pram, he whimpers, protesting like a dog, at being left out of the fun. He knows the pleasures of his bath, the desirableness of various people as companions, and will make gestures of desire or aversion when one or another offers to pick him up. He also knows about his various toys. In one, a little man climbs up a pole when a weight is put in a certain place. He will take the weight and try to hang it on the hook, and sometimes he succeeds.

This is also the stage of banging and dropping; a trying stage to parents and guardians, but apparently satisfying some need in the child. Possibly it is an experimental stage and the baby is interested in the qualities of objects. If so, it is sound and weight that most intrigue him. Any thing that he can reach he will take up, brandish, bang on a table or some other object, and then drop. This will be repeated as often as the object is returned to his hand.

He also looks out on the world beyond reach of experiments with a curious gaze. He likes to see a top spin and will hesitate about touching it, wondering

at its noise and still movement. He will snatch interestedly at a swinging bead, being, in this, on a level with the kitten who likes to join in the game. If he is alone he handles cubes or bricks. An exercise that appeals greatly at this age in holding a thing by the opposition of the thumb and first finger. Hold a locket on a chain before a baby, and he will take it carefully between the thumb and finger, keeping the rest of the hand closed. He will do it again and again, using first one hand then the other. He will feel it in the same way, let it go and catch it a second time. The game may be continued for ten minutes or more. A variant is to have one of those tape measures in a case shaped like an orange from which you pick off a fly and unroll the tape. A baby will solemnly take hold of the fly with his thumb and finger, pull out the tape and let it go back with a snap. Another even simpler form of the amusement is feeling a cotton thread, which some children will do with absorbed attention at about this age.

These outward achievements indicate certain mental powers. The baby is no longer the self-centred creature whose mind was confined to his own body, he has come into contact with the world about him, and learnt to look at that world as composed of beings and things external to himself. Things have characteristics of their own, and these characteristics are the object of his study. Moreover he has learnt that one thing means, or stands for another. His mother squeezing an orange indicates that he will be fed on the juice, and the excitement starts as soon as the preliminary action is noticed. More important still,

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he is learning that sounds are the signs of things, i.e., he is learning the use of language. He is also dealing with other problems, many of which recur again much later. One is the matter of identity and difference. Most things can be arranged in groups and their common character reacted to. Many different situations mean food. These are grouped together and produce the same movements of pleasure. Other things are definitely different; but occasionally two are recognisably alike, but productive of contrary emotions. Once, two sisters, very alike but of different expression, visited the baby. One is full of cheerfulness, the other has a face of extreme melancholy. They sat one on each side of the cot. The child looked from one to the other, frowned, looked again still puzzled, looked at the gay visitor and smiled, looked at the gloomy one and cried.

An older child tackles this problem verbally. John's mother and aunt both had squirrel wraps, alike in texture and colour, but entirely different in make. John aged 3 called furs "pussy". Seeing his aunt one day in her furs he touched them and said "Mother's pussy". "No," was the answer, "not Mother's pussy." The child puzzled over the answer and touched the fur again. Then he went downstairs where his mother's coat hung. He touched this and then returned to his aunt in obvious bewilderment looking from one fur to the other, till it was explained to him. "This is not mother's pussy. But it's like mother's pussy." Then he went on satisfied.

This expression of thought in words belongs to the

next great period of development. Between the age of one and three children learn two things of vast importance—to walk and to talk. Possibly walking begins under the stimulus of curiosity. Certainly the most sensible advantage a baby gains from sitting up is an extension of his range of vision and power. A baby lying on his back in his cot will make efforts to pull himself up by the sides or by the net over his head. If lifted up so that he sits he will look about him, observing the doings of other people in the room, and grinning with delight at his new power. At the same time he is in a much better position for playing with his toys. Standing and walking may follow from the same motives, reinforced by imitation. Certainly the baby walks at first largely in response to a direct desire to go to some other person, or to get some definite thing. A baby who cannot walk or crawl will look at his mother preparing his food and raise a wail after trying in vain to get to her. Carry him to his mother and he is at once pacified.

The impulse to learn to talk is partly instinctive, partly prompted by need and imitation. The mental effects of the power to talk show this clearly. If by any chance talking is delayed beyond the average time, so that a child's wishes and views have acquired definiteness and precision before he has learnt the words in which to clothe them and make them effective, a fierce period of naughtiness generally follows. Words are the keys that unlock so many doors in family life; speech is so indispensable a tool, that to be without it drives the otherwise able baby of two to fury. This irritation is shown by acts, often of

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exasperating ingenuity, calculated to attract attention to himself and his needs. When once speech has been attained, these children improve enormously in virtue, because they have the normal means of getting what they want. Thus while both instinct and imitation play a great part in learning to talk, it is sheer need that drives the baby to perform this really stupendous mental feat. But when once the powers have been acquired they become objects of interest and pride in themselves, and are practised for their own sakes quite apart from their immediate utility ; as the adult practises figure-skating or golf.

These two powers open up intellectual fields far in excess of anything that the mere baby can know, and during this stage of development the child acquires the powers that are distinctively human, and differs from the adult rather in the quantity of its knowledge than in the type of its mind.

I will now describe the mental equipment of a child of two years and eleven months, indicating some of the stages in his development. He has been very carefully brought up and is the child of intelligent parents. When compared with children from a less favourable environment his knowledge in some fields is remarkable. On the other hand the ability to do certain things, which seem to demand certain specific mental powers, and which are little affected by teaching, is not above the average. We can thus see both the great effect that teaching has on a child of this age and the way in which teaching must wait on mental development.

John is well grown and healthy, and during two

years has only been twice sufficiently indisposed to spend a day in bed. He has fairly complete physical control of himself, walks, runs, jumps with a certain amount of difficulty, but has not learnt to co-ordinate his movements sufficiently to catch a ball. He can only hold out his arms and hands and hope it will *fall* into them. He can feed himself and carry a spoonful of milk to his mouth with as steady a hand as an adult, and eat squares of bread soaked in fat spearing each one of them neatly with a fork. He cannot use a knife. He can thread beads on a boot-lace or a bodkin, or even on a piece of catgut (which is harder still). He has been able to do this for some time, and the occupation has become so easy that he has lost interest in it.

Threading beads requires of course more than physical skill. Many children who are well able to put the needle through the hole in the bead, are quite unable to understand that they must then shift their grip to the needle's tip and allow the bead to slide down the string. There is the same intellectual element, but in greater measure, involved in actions such as tying a bow or fastening a buckle. John cannot do either, and though he will watch your demonstration of how it is done with great interest and try to imitate you, he has little real desire to learn, and refuses to practise. Probably he sees no use for the knowledge. His clothes have elastics or buttons, and in any case he has no wish to dress himself. It is rather a dull occupation, and there is a certain amount of amusement to be got from making someone else do it !

He talks well and fluently with very few mispronunciations, the chief being a disinclination to say the final "ll" in "ball" and "wall". I do not know the size of his vocabulary, it is a difficult thing to compute, and any computation must be very inexact when a child is as far developed as this one is. It is certainly adequate to the needs of his daily life, and he is always extending it, and will ask the meaning of a new word promptly. He was being told that some animals lived in *forests* and asked immediately "What is a forest"? On the other hand words which are repeated to him he will accept without an explanation. One of his nursery-rhyme gramophone records contains the phrase "one-horse open sleigh". He has heard the record many times, but has not asked the meaning. When questioned, "Do you know what a sleigh is?" He said "No," and listened to the explanation with attention. This vocabulary has grown by fairly definite stages. At one year eight months he had a certain vocabulary of nouns which he used by themselves. Such words as gee-gee, bow-bow, pussy, ki-ki (bird) were used with a gesture to indicate the object. The mental intention being "This is a pussy". He found great satisfaction in recognising the animals or objects in pictures or real life. Then he knew the names of many of the things he wanted and would say "jam," "cake," "sugar," etc., meaning that he wished to be given these things. He had one adjective in use, "nice," and would say "nice pussy" to Joe, the cat, and he had one verb "cry" and said "Baby cry" about a picture in his A.B.C. book. Many children at this age are far more advanced in speech;



but others, if they have not been talked to and encouraged to learn words, say hardly more at three years old.

A month later he had learnt a few more verbs but still could not really talk, but at one year eleven months he had begun to use sentences. "A cushion, I sit on it," or "John do it". By two years two months he was really learning to talk. His vocabulary was increasing very fast and he was perpetually practising. Alone or in company the flow of talk and questions continued. He would lie in bed in the morning saying over and over again sentences that he had recently learned ; or by a series of questions he would force you to repeat a phrase till he knew it well enough to say it himself. The procedure was highly intelligent, and was just that which modern language teachers have evolved, amid vast flourishes of trumpets, as the Direct Method. One interesting feature of his latest stage is the completeness with which he has discarded his "baby" words. A month or so ago when someone called a bird kiki, he corrected the speaker: "It is a duck," he said; and recently, when his aunt referred to the fur jacket she wore as "pussy," he immediately replied in his cheerful decisive tone, "That's not a pussy, a pussy is like Joe (the cat). That's a fur". Thus snubbed she reverted to standard English.

John's general knowledge is naturally that of his environment. He runs about with his mother, amuses himself in the kitchen, and spends hours "helping" the gardener to dig. He has an ordinary understanding of such things. In two directions his

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knowledge is unusual—concerning motor cars and gramophones he seems wise for his years. His father has a car, and since infancy he has been out in it. From the time when he could first toddle his greatest delight was to run about a motor dealer's showrooms pointing to cars like his Daddy's and his Grandad's ; and he was nearly always right—as far as colour and type of body was concerned. Before he was two he knew that you started a car by turning the starting handle, and when he found a toy car in a shop he at once wound the handle, listened for the engine to start, which it did with a ticking sound, took his place at the wheel and expected it to go. He now has a knowledge which, but for his physical size and weakness, would be dangerous. He takes his place in the driver's seat of his father's car, turns on the engine, advances the spark, kicks in the direction of the self-starter, with the other foot in the direction of the clutch, and lays his hand successively on the gears and the brake. Then having completed the ritual he puts both hands on the steering wheel, and waggles it professionally, gazing down the road with attentive eyes. A little earlier he had the tiresome habit of singing to the noise of the engine and when, on a hill, he saw his father's hand go to the gear lever he at once shifted his note to " low gear ".

There is the same knowledge about gramophones. He understands their working, and the little toy one which he possesses he can wind and start himself. He knows the family records by name and asks for them, and when he has heard one side, he says, " I want to hear the other ". You ask him what the tune

is on the other side and he answers correctly. He can even pick out the records he wants from a pile, judging apparently by the size and colour of the label, for he cannot read. His taste is catholic and in the space of half-an-hour he asked for Nursery Rhymes, jazz, and "Gentle Lady" from "Don Giovanni". He also beats time to the fox-trots giving a performance almost exactly like the conductor of a jazz band, though he has never seen one. As an offset to these signs of mechanical ability he is unable so far to learn how to spin a top by winding a string round it and holding it steady while the string is drawn away. He has insufficient manual dexterity for this winding of the string. Moreover he was much puzzled because his father always threaded the string through a hole before doing the winding. After various attempts and failures he ended up by saying, "I don't seem very clever at this," and passed it all over to his aunt.

He has other knowledge that is, definitely the result of teaching. He knows all his colours, including the "harder ones," such as brown and purple. This knowledge was acquired gradually; at one year eleven months he could match red and blue counters but often made mistakes; by two years two months he talked of the colours of his beads as he threaded them. "Is this a green one?" "Shall I thread a blue one?" For months he played a game nightly with his grandfather which consisted in going round the room and asking the colour of every object in sight. At his present age the knowledge seems well consolidated and the topic uninteresting.

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In another field his abilities are less. When he was two years two months he learnt quite suddenly to arrange a set of graduated cubes in order. Before that on many occasions his aunt had tried to teach him to do so, bidding him build a staircase for someone to walk up. He always did it wrong, putting a big cube over a smaller one and saying "Could he walk up that?" He is still unable to build a staircase with small separate cubes when the steps have to be made of several courses of bricks.

The whole matter of size and distance is occupying his mind greatly. How big? how long? how far? are his perpetual questions. You draw a circle on a piece of paper and he attempts to copy it. "Is this like yours?" "No it is bigger." He draws another. "Is this bigger?" "Is this?" and so on. He will stand on his bed and try to touch the ceiling asking as he stretches his hands upwards, "How far is it now?" An exercise that is quite beyond his powers to perform, but that interests him greatly, is the drawing of a series of lines of graded length, e.g.,

He holds his pencil in his own peculiar way and draws a wriggly line. You say to him, "Draw another longer," showing the model, and he tries. The second line may be any length but he asks "Is this longer?" "Is it longer now?" after he has added a piece to the bottom. These questions represent something that is not quite ignorance. If you press him to answer his own question he will very often reply correctly. His mental attitude is that of one who has a theory in his mind and requires it to be confirmed. Doubtless in a month or so, having formed his own ideas, he will cease to be so particularly interested in distance as he has ceased to be in colours.

His attitude towards pictures has gone through the regular stages. At first he merely named the objects that he could see in them, then he welcomed an explanation of what the people were doing, now he has reached a point that shows he can both understand the picture himself and comment on it. In one of his books is the picture of a child kneeling by his bed, saying his prayers to his mother. The bed is large and there is a doll lying in it. John coming to the picture commented at once as follows:

"I say my prayers *in* bed." "There is a doll in the bed." "Why does he have a big bed?"

He will play the same trick of passing beyond a point, rather to his mother's confusion, with his letters. His father's initials are O.S. and if John is feeling humorously inclined he will pick out D. O. and S. and declare that they are all "Daddy's letter". This ability to incorporate and compare is a sign of mental mastery which some stupid adults possess in

a very limited degree. For many people facts remain disconnected and their connection and implications are never clear. For them, knowledge is not a whole, one part illuminating the other, but a disconnected series of facts. John is quite capable of comparisons. When looking at a picture book he came across the picture of an Irish setter. He said at once, "That is Dinah" (his aunt's dog), "but it's bigger than Dinah". All this was true. Dinah is of the breed, and a young and particularly lanky creature. Again two months' later he came on the picture of a yellow and brown cat. He said, "That's Tony Baxter" (a "marmalade" cat belonging to another aunt) "but it has brown on. Tony Baxter hasn't". This again was true.

This power of comparison does not extend to his own efforts of drawing. A child's early drawings are remarkable for several things. In the first place his muscular control over the pencil is so weak that he *cannot* draw anything much; but more important he neither knows *how* to draw nor does he look at the model he is supposed to be copying. John aged two years ten months was playing with a pencil. "Draw Baby Nigel", his nurse said. "How *do* I draw Baby Nigel?" "Try." "I can't. How do I *do* it?" The nurse took the pencil and made a little drawing saying, "Here's his head, here are his two little eyes," etc. John took the pencil from her and to a patter of "Here is his head, here are his two eyes, here are his two *little* legs," drew the following "pictures" one of his mother, one of Baby Nigel.



Mother.

Baby Nigel.

These "drawings" must be interpreted with a kindly eye but they do show that "two legs" are represented as two, and the pencil has to some extent interpreted the patter which ran, in the case of his mother, "Here are her two *long* legs".

John's relation to the world of imagination is interesting. When he was two years two months he was first noticed to be playing "pretend games". He would drive a "bus" or run round punching tickets. He also played with his toy animals talking to them, bidding them not be impatient and take their turns at riding on a cart. When lying in bed

in the morning he would, at about this age, talk to himself imagining little things. One morning he lay for a long time twisting a piece of the blanket round his hand and saying "This is a glove. Now I take it off. I put it on", etc.

At two years nine months he definitely started romancing, and developed a game which you were expected to play after this manner.

"Where have you been to-day, John?"

"I've been to London."

"How did you go?"

"I went in Daddy's car," etc.

He would also begin spontaneously. The yellow kitten came into the room and some one said:

"Here's Tony Baxter."

"Yes," was the answer, "and I can see another kitten. It's a *green* one." Two months later he had begun to tell "stories" but they were really only incoherent collections of phrases culled from other tales. After he had been told the story of the little pig which wouldn't get over the stile, John's "story" ran:

"Once upon a time there was a little dog and it came along and she said 'come along' and he said 'coming home,' and she said 'yes, light, light, come and burn the stick'."

Another "story" was slightly more coherent, and ran "I went to Oxford and sat on a tree, and a spider came up to me and said I won't hurt you".

These stories are generally half whispered and told very fast as if he were a little ashamed of them.

There is probably also a story world which lies



deeper for him, for he talks to himself a great deal when playing alone, and if his mother asks what it is all about replies :

" Oh Mummy, *please* don't ask me."

On the other hand he will often reject your inventions. His aunt told him a story about his toy terrier chasing a rabbit and he rebuked her at the end.

" He can't run. We have to carry him. He couldn't catch a rabbit. He's only a *pretend* dog."

Yet his own romances have the very smallest hold on reality, and seem designed to provide diversion rather than anything else. Whilst drinking his normal cup of milk he began to say :

" This tastes just like coffee. Why does it taste like coffee? I like coffee," and with this fiction got through about half of the slightly distasteful liquid. At the end he said quite candidly, " What *is* coffee? "

His emotional and moral life is also developing. By temperament and training he is a very friendly child, expecting no harm from any one ; but he is also rather nervous, and when he is introduced to a stranger there is a period when his natural nervousness contends with his acquired confidence ; and in the end, after a quaint expression of doubt, he accepts the new acquaintance. When he knows you he is intensely friendly and anxious to be amused, while his vivacity and range of interest make him an attractive, if fatiguing, playmate.

His moral education is mainly based on one doctrine, that you should not annoy your neighbours, and he will nearly always stop doing a thing if told that someone would not like it. This has developed positively,

and he will look at Baby Nigel and say "I should like to give him this to play with" or "What does Baby Nigel want? Can I give it him?"

At the same time there is a large streak of impishness in his make-up. All growing things pass from a stage of dependence to one of contrariness. It is most interesting to observe this in a kitten. A little kitten will come only too gladly when summoned; as soon as it gets somewhat bigger it runs away and expects you to provide it with the amusement of a chase. A baby, when it can walk well, begins to manifest this spirit. Call it, and it may toddle away glancing over its shoulder and laughing. John expressed the matter well in his articulate manner. When his mother reproached him for being naughty he replied: "But I *like* being naughty."

These exhibitions of contrariness are rare in an extreme form, but they add spice to his intellectual amusements. He likes to correct your use of words, enjoys puzzling you by an unexpected piece of romancing, or gives you an answer about numbers, colours or letters that is right but unanticipated. The grin on his face as he does it leaves no doubt as to his intentions.

Other virtues are being acquired by experiment and example. For instance you say to him, "Put the nut crackers away in their proper place," and he answers, doing it, "I will put them away in their proper place. That would be *tidy*". Thus a general conception is being formed and acted on.

The greatest weakness in the mental equipment of a young child is the inability to apprehend a general

scheme. Little children cannot arrange things in a pattern. It is said that in schools this power of pattern-making with beads or blocks develops about five-and-a-half years. It may develop earlier in John. At present however he has no idea of it. He cannot even understand the pattern involved in building a staircase of separate bricks or in building a wall of two or three courses of cubes. Again he cannot form a conception of a story as a whole to tell himself, though he can understand one told to him. His mechanical ability is conditioned as much by his failure to grasp things as wholes as by his physical weakness. He can learn to do a series of actions, but he cannot manage to apprehend the pattern of acts involved in tying a bow or buckling a strap. This organising power of the mind differs greatly in adults and is one of the chief constituents of high ability. No normal adult is as stupid in this respect as John, but many are not very much farther advanced. The person of high ability has extremely superior powers of synthesis and can apprehend a "pattern" which is both of wide extent and great complication.

Thus in the nursery stage of a child carefully tended at home we can see the passage from infancy, when the baby is merely a living creature, far inferior to a kitten, through a stage that corresponds very closely in mental attainments to that of the domestic animals, on to a condition when all the main characteristics of human personality are shown, and the mind is definitely like that of the adult though still lacking in experience and general knowledge.

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### EXERCISES

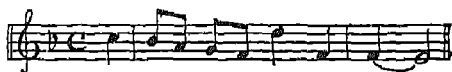
- 1.—Take any child that you know well, and study his behaviour in as many fields as you can. Be sure to note his age.
- 2.—Choose a child and keep a week-to-week or month-to-month record of his progress in some power, e.g. speech.
- 3.—Make a study of a petted animal and compare his powers in detail with those of a baby of a certain age.

### BOOKS

- |               |  |
|---------------|--|
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## CHAPTER II

### NURSERY SCHOOLS AND CLASSES



THE child from an intellectual home is frequently sent to school at four, because his growing and restless mind has become tired of the comparative monotony of his own nursery and garden. The school for tiny children, where they learn to play with each other, dance, occupy themselves with fresh toys and special apparatus is recognised as desirable even by those families, who give their children most care and thought at home. For children whose parents are too busy or too ignorant to care intelligently for their offsprings' training, or for children who have no brothers and sisters with whom they can play, but especially for those children whose physical environment is unhealthy, a school for children under five years old is essential.

It is frequently said, however, that mothers should look after their children until they are five at least, and much sentimental talk is apt to obscure the real facts of the case. Many mothers in good conditions can give their children all and more than the best schools can. But we cannot ignore the frequent unfitness of mothers for the task of educating their young children; and it is still more dangerous to ignore the terrible

conditions in which many mothers and children live—conditions in which it is quite impossible for the children to be trained well, mentally, morally, or physically.

Moreover, the people who deplore the Nursery School movement overlook or under-estimate the vast amount of learning that a child can do in favourable circumstances before it is five. The child quoted in the previous chapter had—before he was *three*—learnt to talk better than most five-year-olds in the elementary schools. By the time he was three years three months he knew all his letters fluently, and before he was five he could read simple stories and write a *very* simple letter—with a certain amount of parental assistance. He had not been sent to school because his father was stationed in a district where there were no schools, but his intellectual development had been fostered by intercourse with educated adults who had given him constant attention, and had been at great pains to get what guidance they could in the matter of his education. There is no need to stress the difference between this child's development and that of a child who receives little or no systematic training. The damage done to mind and body in these early years is often irreparable. It is probable that we spend vainly millions of money on remedial health and social services which endeavour to restore, in later years, what has been so foolishly lost in the early years of a child's life.

The movement for Nursery Schools in England owes most to the sisters Rachel and Margaret MacMillan. It was they who founded the now very famous school in Deptford, and it was Margaret MacMillan who

continued until her death to be the most energetic and persuasive publicist of the movement.

The initial step was taken largely on grounds of health. The slum child from two to five was nobody's concern. The infant-care committees considered him too old for their ministrations, the school did not yet recognise his existence, and, disowned by all, he tumbled about on doorsteps, crawled in gutters or in airless tenements, and contracted all the diseases due to dirt and bad air. The Nursery School steps in and provides the child with an environment which allows his healthy development.

In consequence the typical Nursery School is an open air building. The importance of open air schools for children of all ages cannot be too strongly emphasised, yet most authorities and teachers use them only as places to which children already crippled by their conditions of life are sent to try and regain normality—to be crippled once more on their return to badly ventilated buildings. Open air schools are often free of epidemics when all the other schools in the town are suffering. In one northern town an open air and ordinary school adjoined, the one engaged in curing tuberculosis produced by the closed (and painted-in) windows of the other. Even from the teachers' point of view the matter is very important. One is far less fatigued after teaching in an open-sided room than in one that is closed.

The MacMillan Nursery School was therefore a shelter looking out on to an open space of ground, and the results achieved were at once remarkable. The children who came with rickets, anæmia, sores and weakness

improved, and in two years were cured. The school was free from epidemics, and the petty ills that keep school clinics full of children simply did not occur. But it was not fresh air only that was responsible, but constant cleanliness, sensible food and suitable clothing. The Nursery School to be effective must take full charge of the child's physical life and keep him at school something like nine hours a day.

The first essential is a suitable space—for it is space not buildings that is the chief thing. The terrible mountains of brick that County Councils reared in 1890-1910 are the curse of present-day education. The Nursery School starts at the opposite end. It asks for a space, almost any space will do, and given that space it makes small demands except for plumbing.

In the "space", shelters of a semi-permanent nature are built. In this, as in all school architecture, semi-permanent buildings are much preferable to costly works that are expected to last fifty years or a hundred. Ideas change so rapidly that we outgrow our buildings before they are worn out; the cheaper the buildings, the readier we are to replace them. The shelters of a Nursery School face south or south-east and have that side open to the air. A wide verandah should shelter the actual room from driving rain, and there should be moveable screens which can be put up on the very worst days. The lighting can be partly from the open side, partly from gable lights above the verandah roof or skylights. In any case it must be ample. The base of the shelter is concrete, with a floor above, and heating pipes.



should run under the floor. The top covering should be good linoleum or some composition that will not splinter, is easily washed and pleasant for the children to sit on. The walls and roof may be of asbestos or other composition sheeting. The other essential of a shelter is that it should have its own bathroom, opening out to the main room with large sliding doors that give an uninterrupted view from one to the other; and abundance of hot and cold water.

The furniture of the bathroom is if anything more important than that of the rest of the shelter and both vary with the age of the children. For children of two years the bathroom needs a large bath, raised so that a teacher need not stoop when washing a child, and a wide strong table of such height that she can stand a child on it to dress him. There must be an adjoining cloak room, and lavatories so fitted that the children can use them with ease. There must be low basins where children can wash their hands, and rows of pegs for towels, tooth brushes, etc. As has been said, the doors which separate the bathroom from the main shelter should slide back so that the teacher in charge can look from one room to the other and see what is happening to the children she has already attended to. Above all, the bathroom should have ample space, and windows, and be a pleasant place so that teachers and children alike feel that cleanliness is an attractive thing and washing a business to be enjoyed. The playroom needs small folding tables and little light chairs. These can be cleared away easily, and then the children have all the floor space to play in. There must be a long line of low cupboards and a

bigger cupboard to hold the folding beds on which the children sleep in the afternoon.

With older children the equipment varies somewhat, three and four-year-olds need firmer tables as they are more likely to work at them. They do not need to be bathed and dressed in quite the same way, so that a wide spray bath, where some six children can be washed together, is preferable. The verandah of the toddlers' room requires a balustrade and gates that can be fastened at need, and there must be only the smallest step down into the garden. The older children, though they like a rail to lean on, do not need gates, and two or three steps give their verandah a pleasant eminence. All classes need pictures on the walls, and some musical instruments. Above all the rooms must be large enough. For twenty-five children, aged three or four, at least 600 square feet is necessary, or a room 30 by 20 ft. This is more than twice the statutory allowance for children in elementary schools.

The cost of building such a shelter for thirty-five children was in 1927 about £470, of this *more than half* was spent on the plumbing.

The total cost of building a Nursery School is roughly this multiplied by the number of shelters plus the cost of the land. For it is not necessary or even desirable that a Nursery School should have a hall or other central buildings, except a kitchen and a teachers' room. The use of a hall in a school is for assembly purposes and to give space where the children can move freely. In a Nursery School there should be no assembly. Such an expression of corporate unity means

nothing to the little child and all gatherings are dangerous as being excellent opportunities for infection. Each shelter has in itself the space that children require, so that they do not need a hall for recreation.

Besides the shelters a Nursery School needs a garden. It needs it for purposes of health, and also as providing indispensable experience and opportunities for development. The garden should offer the maximum variety to the children. There should be a paved or asphalted strip where they can run about in wet weather or ride scooters and "kiddy cars" or drag wagons. There should be grass, trees—if only little ones (and in some ways little ones are preferable as being easier to climb)—and narrow flower beds. If possible there should be a bank that they can roll down, a sand pit to dig in, and a pool for paddling. There should also be a set of bars, such as the "jungle-gym", where the children can climb; a swing is useful, and a slide.

There is no need to imagine a Nursery School garden either as the pleasance of a country house, nor as the barren stretch of asphalt that lies sun-baked or wind-swept round most schools. The teacher should have a clear idea in her mind of a pleasant place for children, conditioned by the limitations of the site. It is most likely that there will be no trees when the place is taken over. The quickest growing trees are chestnuts and poplars. But these are big trees and one or two would perhaps be enough. The more useful trees are the smallest ones that are also decorative—laburnums, mayes and rowan trees. Almond is valuable because it flowers so early, and the shade of the boughs, though pleasant, is never dense. The same is true of all the

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other fruit trees, and the value of real home grown apples and plums could not be exaggerated. Any one taking over a Nursery School should plant trees, perhaps fruit trees, as a first duty.

The flower beds ought to be narrow. Children like to weed, plant or touch the flowers, and wide beds make this impossible except at the cost of trampling on the earth. The flowers should be of two kinds, the big perennials, and the annuals that the children sow themselves. Irises, peonies, lupins, oriental poppies, roses, lilies, phlox, michaelmas daisies, make a good succession throughout the summer, and they will grow in most soils. There are small flowers such as violas, rock roses and aubrietia that grow readily. Bulbs will generally do fairly well, crocuses, daffodils and tulips. The children can sow such things as Virginia stock, nasturtiums, which will grow anywhere—even in builder's rubbish that kills almost everything else—eschscholtzia and marigolds. A few plants might be grown especially for smell, such as lavender, old man or sweet briar.

In the Spring the children could plant and weed, later they can water, and they should always be encouraged to look at, touch and smell the flowers. If the teacher picks some of the blossoms the children could be allowed to arrange them in water. Such arrangement gives very great pleasure and is a good training in many ways. For most people flowers are the most lovely things in their lives. The colours, textures, scent, manner of growth have more individual loveliness than any other part of the world. The adult is apt to take most pleasure in a scene as a whole,

and looks not so much to the individual element as to the general form and setting, but a little child has not much appreciation of a landscape or an architectural group. He must find his pleasure in the small and the simple. The appreciation of flowers trains his senses and gives him that inarticulate pleasure which children feel. The careful arrangement of them, teaches him much manual dexterity, and also a respect for the blossoms themselves. Only the biggest children should be allowed to *pick* flowers. Babies simply pull the heads off and bring them crushed in a hot hand.

A heap of sand, either simply dumped on the paved part of the garden, or placed in a depression, is within the power of any school to provide. If there is no "pit", the sand might be kept in place by an edging of planks. If possible there should be a tarpaulin cover which could be dragged over at night to keep it dry and clean. Children play with sand for hours. The youngest seem mainly to pick it up and let it run through their fingers, the older ones build castles, take moulds of buckets and furnish forth imaginary meals.

The paddling pool is more difficult and its advisability is more doubtful. It should be a shallow depression in the concrete, possibly ring-shaped with an island in the middle. It is undoubtedly a source of vast pleasure, but children may get wet (though this does not happen as often as might be expected), and it needs to be emptied and cleaned periodically. To be quite satisfactory it should have a vent that can be opened or closed, and be filled from a tap. One additional advantage is that the birds can use it as a

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bath, and the children watch them on days when it is too cold for they themselves to paddle.

The children should spend as much time as possible in the garden, and should always play there on fine days, bringing their chairs and tables out if necessary. On cold days they should be encouraged to run about, climb and play with their scooters, returning indoors for other occupations. At all times, except in really bad weather, the garden should be free to them—and any individual child should be at liberty to wander out and amuse himself there. This of course does not apply to the toddlers who need more constant supervision.

Besides caring for the children's health the Nursery School makes every attempt to develop the children intellectually and morally. In this respect it differs from the mere crèche, where the matron often has only nurse's training. The Nursery School teacher needs more than this. It sometimes happens that children are sent to a Home where they are cared for physically in a very satisfactory way, but receive very little training beyond. The result is striking. Some children of five at a Home of this kind can hardly talk, and though they have often plenty to say, their pronunciation is as defective as that of a child of two. They have no intellectual interests. They cannot listen to a story, do not know how to look at pictures, have little appreciation of rhythm or music, and are apt to be extremely turbulent, because they do not know how else to amuse themselves.

The indoor occupations of the Nursery School child must be such as to develop his powers, and

naturally they will differ with his age. At two the average child is mainly occupied with gaining control of his limbs and in learning to talk. His play is of a very simple kind, running about, putting one thing into another, piling bricks up in no particular order. He is not social and does not really play with other children, though he may stand a long time watching them.

One American investigation consisted in watching children of different ages engaged in free play and noting their activities for a period of fifty minutes. The following are typical records of children aged two :

(a) " Played with blocks, then doll buggy, then sand with car and trowel. Spent considerable time watching other activities going on about her. Talked but little. Play was chiefly non-social and without plan."

(b) " Cut paper into scraps. Put some pegs into peg board. Played at sand table with cup and boats. No playmates—seemed to ignore other children utterly, no conversation. No evidence of plan, very quiet."

The most noticeable points from the records are the lack of plan in the child's play and his unsociability. Nearly all the records mention both. The little child just goes from one thing to another as chance directs, and he plays with them very simply, as is natural in his incompetent state. He can do very little. He can perform no finely adjusted movements, and he can understand no complicated processes. The most popular occupation at this age seems to be playing with sand. This fulfils the conditions very well. It is

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not complicated. A little child gathers up handfuls and puts them into a bucket, tips the sand out again and gathers it up once more. The activity continues for a period that seems incredibly long to the adult—just as the adult's absorption in a round of golf seems unendurably lengthy to the child of ten asked to caddy! It is extremely difficult to understand exactly what pleasure the child derives from handling the sand, or pushing the doll's pram up and down a side of the room, but the pleasure is there and most real, and the helpful adult should not try to introduce her ideas of purpose to a child as yet too young to appreciate them.

By three years old the play has rather changed its character, and the child begins to show some signs of social play, the beginnings of imagination, and a little planning. The following is an account of one child of three.

(a) "Played with sand, doll, furniture, train, piano, jumping rope, seemed a leader of a small group. Paid little attention to other activities going on round her, talked a fair amount, especially when playing house. Quite a bit of imaginative play during the house play—got into bed, pretended to be ill. Active, social."

At four years there is yet another change. The children are not only social, they assume definite positions in the group. They are also capable of play involving much more advanced physical processes. The co-ordination of their muscles has so improved that they can cut paper easily, can use paste, a pencil, and fit puzzles together. Here is one observation that illustrates the relations within the group.



*Four years.*

(a) "Played at the table with paper, scissors, crayons. Had a sort of motherly attitude towards the other children at the table. Very willing to help younger children and much interested in what they were doing. Definitely a leader. Watched only the activities at that table. Talked quite a bit. Quiet, social, original, playful and persistent."

These characteristics should be kept in mind when toys are chosen. Perhaps the two most useful occupations are a sand pit or trays and building blocks. The latter should be abundant and of different sizes. It is possible to get large hollow blocks so that the children can make quite large structures with blocks within their power to lift. Apart from these the most useful are ordinary cubes of wood, two or three inches square. These are preferable to the elaborate blocks that are sometimes sold in sets, as they can be put to more uses. If money is not available for buying bricks, or if extra ones are needed, a carpenter's shop in the nearest woodwork centre, will generally give away a large number of ends of wood that only need rubbing with sand paper to be perfectly serviceable. Sometimes too a County Council will allow a school to have old wood paving blocks, which, when cleaned a little, are admirable for building in the garden.

Sand and blocks are suitable toys for all the ages in the Nursery School. They are used differently as the child grows. The little child simply piles bricks together, the older one builds houses or garages and does so regularly and to plan. In the same way the two-year-old handles the sand, the elder child

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imagines he is making dishes for a dinner as he shapes it into balls or heaps.

Very useful toys for indoors are a doll's bed with coverlets that the children fold and unfold, a tea set, with which to make imaginary tea, animals, dolls, especially if they dress and undress, Noah's ark, etc. For outside, scooters and kiddie cars are popular; balls, carts, etc., to drag about.

For the older children toys of another nature are possible; they can use chalk and boards for drawing, cut out things in paper, sort colours, look at picture books, and in a few cases begin to learn to read. The younger children might well have a certain amount of the Montessori sense-training apparatus, and for normal children this is its proper place, rather than the infant school.

Very important activities of the Nursery School are music and dancing. Some children of three enjoy listening to music for its own sake. The child who wants music played to him should be able to have it, but the whole school should not be made to listen to it for too long. Nearly every one, however, likes moving to music, and marching to music or simple dancing should begin very young. Further, children should be encouraged to sing, and nursery rhymes with action should early be part of the child's occupations. In the Nursery School day this music period should be one of the fixed events.

The arrangement of the Nursery School day is simple and leisurely. The proper Nursery School starts early and ends late. This means that the children are in a good environment for as long as possible,

and also it is to the advantage of the parents who leave their children on the way to work, and fetch them back on their return. In the Rachel Macmillan school three meals are served, the children arriving about eight, and going home between five and five-thirty.

When the children come they are washed and changed into their school clothes. At nine there is breakfast of porridge (with salt), crusts and milk. Then the room is put straight, the children helping. Play follows till about ten-thirty. Then there is a period for music. Then play again till about eleven-thirty. The children are washed and got ready for dinner and the tables are laid. Dinner is at twelve, and a characteristic meal is minced meat with green vegetables and potatoes, rice pudding and Sun-maid raisins. The children help to serve the meal, and to clear up. Then they wash again and go to lie down. The folding beds are pulled out, and from about one to three they are resting or asleep. Tea is at four and consists of bread and butter, with jam or honey and plain cake. On many days there are raw apples at one meal. After tea there is more play till it is time to go home.

This is an extremely long day for the teacher and a very heavy one, unless arrangements have been made which render the material part of her work easy. The teacher should not have to be always carrying pails of water for washing, nor of course should she have to cook. It is one of the chief differences between the real Nursery School and the Nursery Classes, to be discussed later, that the Nursery Class is seldom

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properly equipped and the teachers' work is made so heavy on the material side that she has little time or energy to spare for the mental.

There are two great principles governing the management of work in the Nursery School. Children should be encouraged to do as much as possible for themselves and to learn independence, and there should be no formal lessons. In some countries, particularly in the East, upper-class children are never allowed to do anything for themselves. The result is striking to one newly come from England, and the effects persist into adult life. Work is always devolved on someone else, with the result that for one man doing a job there are always several people watching him do it. The educated adult is as helpless as a child, and three or four examiners, giving out papers, or collecting them after an examination, chatter over the work like jack-daws, and have not the slightest idea of division of labour or general arrangement. The Englishman, till wonder has passed, is aghast at the almost universal incompetence. The Nursery School starts from the first to train children in self-help. Whatever a child can do should be left to him to manage, and the fittings of the school should be such as to make all things possible. Chairs and tables should be light, cupboards should be low. In the lavatories the seats should be low, and chains for the flushes at the child's level. The clothing the children wear should be simple, and with fastenings that can be managed, e.g., frocks should fasten in front, and knickers be on an elastic.

The second point is also important. Children under

five have very little idea of social grouping, their attention is most unstable, and the attempt to teach them in any way as a group is not likely to succeed. Each child must be an individual, and play, or attend as he sees fit. In music periods even, there should be no compulsion, and a child who does not want to dance can always stand aside. Naturally during the play periods there is no grouping except that which arises spontaneously. In consequence the staffing of the Nursery School has to be more generous than in other classes. No trained teacher should be in charge of more than thirty-five to forty children, and she needs probably two helpers for that number.

These helpers are a feature of Nursery Schools, and they do not correspond to anything in the schools for older children. Their nearest equivalent is the old pupil teacher, bound apprentice to a school master at the age of fourteen. It is hoped however that these helpers will be of a slightly different type. Some of them may intend to be teachers, others nurses, and they are often still in attendance at e.g., a day continuation school. Their pay may vary between £10 and £80 per annum in accordance with their age and experience. With the aid of these helpers it should be possible for the teacher to have certain rest periods—especially during the afternoon when the children are asleep.

A Nursery School of two hundred and sixty children run on these lines costs about £11 15s. a head. This includes the heating of the open air rooms, which is of course high for the six winter months, and the three meals a day. This is reckoned as costing two shillings

per head per week and in all probability the parents would pay a large part of this sum. At present the cost per child per year in a public elementary school is about £10 a year, though the figures for different authorities vary between Barnsley, £7 1s. 4d. and West Ham, £16 6s. od.

One great function of the Nursery School is the education of the mothers. This is done in various ways. They bring their children in the morning and see the school and the way the children are kept. If the children have school clothes, which are light and pretty the parents see them and are encouraged to make others themselves. They see that the children are happier without the heavy shoes that they wear at home. A large amount of suffering is caused to children by wearing heavy shoes which cramp the feet and produce malformation and flat foot. Mothers can often be persuaded to buy the children pumps or plimsolls at least to wear in school. The change in the standard of cleanliness and dress in Nursery School children is remarkable when once the mothers have got used to the ways of the school.

Besides this the mothers come again in the evening, and as work is over they can be gathered for meetings on various topics. The mothers assemble, have a cup of tea and discuss some matter concerned with the bringing up of children. In this way the whole educational tone of the district is gradually raised. If children go home early these meetings are far harder to arrange.

The growth of Nursery Schools has been slow—how slow the accompanying tables show—but most

Table 31. [—] 6.—NURSERY SCHOOLS.  
Summary Figures for the year ended 31st March.

Year.	Schools.			Children.								
	L.E.A. 2.	Non- L.E.A. 3.	Total. 4.	Accommodation.		Average Number on Registers.			Average Attendance.			
				L.E.A. 5.	Non- L.E.A. 6.	Total. 7.	L.E.A. 8.	Non- L.E.A. 9.	Total. 10.	L.E.A. 11.	Non- L.E.A. 12.	Total. 13.
1927 ..	12	15	27	652	715	1,367	710	744	1,454	542	617	1,159
1928 ..	11	15	26	622	745	1,367	677	768	1,445	537	621	1,158
1929 ..	12	16	28	722	854	1,576	767	797	1,564	591	642	1,233

Table 32. [—] Teachers, \*on 31st March, by Grade.

Year.	Certificated Teachers.			Uncertificated Teachers.			Other Recognised Teachers.			Total.		
	L.E.A. Schools		Non-L.E.S. Schools	L.E.A. Schools		Non-L.E.A. Schools	L.E.A. Schools		Non-L.E.A. Schools	L.E.A. Schools		Non-L.E.A. Schools
	2.	12	3.	5.	6.	7.	8.	9.	10.	11.	12.	13.
I.												
1927 ..	12	10	22	2	2	4	3	6	9	17	18	35
1928 ..	12	10	22	2	4	6	2	5	7	16	19	35
1929 ..	13	10	23	3	4	7	2	7	9	18	21	39

\* In addition varying numbers of assistants, not recognised as Teachers, are employed.

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Authorities now recognise the importance of making some provision for children under five. The regulation of the Board of Education is at present vague and permissive: "Nursery Schools or other suitable accommodation" may be provided, and the "suitability" of the accommodation is interpreted very loosely. There are still classes of fifty babies sitting on the backless benches of sixty years ago, and many classes provided for children under five are far from "satisfactory" in any ordinary use of the term.

The classes for "under-fives," when they are part of an ordinary Infants' School, are often called Nursery Classes. Although this term has no official sanction, and no special grants are paid to Authorities by the Board of Education for these classes, yet the name connotes for most teachers, a room quite different from the ordinary Babies' Room. The good Nursery Class has twenty-five or thirty children in charge of one teacher. The room is large—600 or more square feet—there is suitable washing and lavatory accommodation, and there is good equipment for a mid-morning meal, for sleeping and playing. There is often a garden, and the time-table is as free as that of a Nursery School.

There are many people who feel that it is an advantage to have many such classes scattered about the town rather than to have one Nursery School serving a comparatively small area. Frequently, older children, attending the same school, can bring the babies to the Nursery Class, while the mothers themselves have to take them to the Nursery School.



But many so-called Nursery Classes are disgracefully misnamed.

In one school the Nursery Room had no sink, and all water had to be heated in the room. As a result a very large part of the teacher's time was occupied with carrying water, emptying basins and removing dirty water. In consequence she had neither the time nor energy to play *with* the children or lend any air of gaiety to the work. In another school the Nursery Class was in a room used at night for other purposes. The room was cheerless, the floor dirty, and the ventilation bad. In this class the children took off their overalls after lunch and did not put them on again so that labour might be saved.

But good or bad, all Nursery Classes suffer from one great defect. They have only the same length day as the other classes. This means that washing and feeding cannot be undertaken with the same care and thoroughness, and the children suffer from a broken day, spent often in two environments whose effects counteract each other. Another difficulty is that the architecture and plumbing of an under-fives' class room tends, even in new schools, to approximate to that of the rest of the schools so that there is seldom a bath, and the playground, which the babies share with the rest of the school, is asphalted barrenness and not a garden. But there is also a hope that the inclusion of Nursery Classes in the ordinary Infants' Schools might well convert and transform the whole of the school to the image of the Nursery Class, and secure for all children the space and air and freedom which so far we have dared to claim only for the under-fives.

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### EXERCISES

- 1.—Draw a plan of your ideal Nursery School and explain any special arrangements.
- 2.—Make a sketch of (a) the ideal shelter or (b) the ideal garden.
- 3.—Watch a child at free play for e.g. 30 minutes and make a record of all he does and says. State age of child.
- 4.—Keep a record for one morning of the use made of any one piece of apparatus. Say how long it was used, how often and how. From a comparison of several such records say which are the most successful toys. State age of children.
- 5.—Keep a record of the various types of imaginative play of children of different ages.

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## CHAPTER III

### INFANTS' SCHOOLS



Both of the Babes were strong and stout  
And considering all things, clever.

If Infants' Schools received children who all had had a careful nursery education, whether at home or school, their task would be comparatively easy. A carefully nurtured child of five can be extremely competent. He should be fully in command of his own body, except as regards complicated, or finely adjusted movements. He can run, climb, catch a ball, eat neatly at table, but he probably cannot tie a bow knot, nor write. A girl of that age cannot sew, except the largest tacking stitches, and any attempt to make her is apt to be unduly fatiguing and harmful to the eyes.

The five-year-old also should have a thorough command of language. If he has grown up among adults who speak well and fluently he should know all the words in common use and be able to pronounce them correctly. There are of course many words which describe things a child has never seen. For example a child of three will ask the meaning of the word "violin." The object has not yet entered his

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experience and can hardly be explained satisfactorily. At five a child's world is wider, but much is of necessity unknown, and the knowledge can only come gradually and by experience. Yet spoken language need be no further trouble to such children.

In the same way the child should have passed through all the stages of "sense training". He should not only know what is red or blue, he should have arrived at the *use* of the colours when using chalks or paints. Music and rhythm should be familiar to him. If he cannot yet read he knows what books are for, and how to look at them and turn the pages without tearing them. Pictures are familiar things, and the mental attitude of listening to a story has been acquired. It is possible for the adult and the five-year-old to meet on very fair terms of equality.

But it must not be forgotten that five years old is also a baby age, and that the child, if definitely one with the adult in intelligence, is in emotional reactions and in experience a world away. The child who has mastered language is still very ignorant of emotional self-control, and most unstable in attention and effort.

Unfortunately the children who enter the Infants' School at five have not, in the majority of cases, come from specially cultured homes. They have grown up as best they can, and the condition, mental and physical, of these children is the most cogent argument for Nursery Schools.

The result is that Infants' Schools have a complex task. In the lower classes they are giving—rather belatedly—the culture which should have been given

by the home or the Nursery School, in the higher classes they are hurriedly teaching the children the tools of knowledge that they will need later. Nowhere is the complex function of a school more clearly shown than in the Infants' School.

It is commonly said, and is probably true, that the main lines of a child's moral nature are fixed by the age of about seven. If that is so the responsibilities of the Infants' School are particularly heavy. But of course the school is only one among many factors affecting the young child, and natural inclination, no less than home treatment may have a predominant effect. But supposing the school had a free hand, what would it set out to achieve in the moral sphere? This question may appear to concern religion, because, in the minds of many, doctrinal religion and morals are inseparable. That view is not taken here. There are certain attitudes of mind which can be encouraged without reference to religion, just as they can be encouraged in the closest connection with it. The association of the two elements can be varied as much as the parent or teacher chooses, and the effect on *morals* should in the end be much the same.

Children, as we wish them to be, should be kind to others, helpful, willing and cheerful. They should be active, and deeply interested in the things they do. They should be reliable, and should carry out instructions with a fair degree of accuracy. They should be courageous, and intelligently obedient.

With normal children a careful upbringing will generally secure these virtues, or at least a fair proportion of them. Many children are constitutionally

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nervous, and frightened by noises. They cry as babies when the bath water runs away. At four they need to hold their nurse's hand before they can pass a steam roller, but if they have achieved the *idea* of courage they try, even when they are only three or so, to overcome their fears. In the same way some children are constitutionally of an over-bearing disposition, and it needs much training before they can learn to help others; but when once the *idea* has been understood, the child will do much to teach himself. It is quite remarkable how young children study ideals of conduct. The idea of being kind to a baby brother, and of not hurting pussy spreads from concrete cases to more general judgments. Children try over the words which convey the concept, "Was that *kind* of him? I don't think it was kind of him to do that," and it is not long before kindness as an independent and valuable quality is established in the child's mind.

The practice of responsibility, though often considered an adult virtue, is well within the powers of small children. The baby at the Nursery School carrying plates of food to the table for its companions is intensely responsible, and performs its tasks with the care of a conscientious man engaged in an engineering feat on which many people's lives depend. A child near the upper end of the Infants' School is quite competent to perform a large number of duties. At one school the registers were collected and distributed, notes taken, and the business side of the school apparently managed by a charming red-headed girl of six. There is no doubt at all that training of this sort is as beneficial at six as sixteen, and the Infants' School child is as

capable of performing tasks of public utility as any older person. But of course the tasks must be simple and not involve too much effort or too many stages.

There is one quality that we wish all children to develop. It is partly moral and partly social, and goes under no one name. It is, briefly, a friendly approach to his fellow-beings. But it is more than that. It is almost Charity in the old religious sense. There is a recent novel by David Garnet called *No Love* which attempts to trace the effects on character and life of the lack of this quality. The child of self-centred parents grows into a hostile, rather brutal youth, and becomes in his turn an uncomprehending father. All through his life there is a lack of something, some fundamental defect, and the hero thinking over his friend sums up the situation :

" 'What's wrong with Simon, what's wrong? I know him as well as I know myself—there's always been something wrong with him all his life. What's the reason? ' Benedict stopped short. He knew that in an hour he would be in London, then he would be back in his room and that his visit to Simon would have receded into the jumbled past, full of unimportant things, but, for the moment, he felt that he was on the brink of an explanation. ' It's because there's No Love. No Love in his heart. He has never learned what it is from other people. That's the explanation. No Love.' "

On the other hand children reared in an affectionate atmosphere insensibly acquire an attitude of friendliness, confidence, and consideration for others. There is nothing more delightful in the world than the

behaviour of a loved child who is not spoiled. Children understand perfectly well the reproof that is given in love, and do not resent it. It may deter them from bad behaviour in the future, but it does not breed fear or discontent. Very different is the effect of the haphazard upbringing many children receive, where general indifference is varied by a blow when the parents' personal comfort is interfered with. Yet these mothers "love" their children, and roll up their sleeves and prepare for battle at the smallest outside criticism. If the child comes from a home where Charity prevails the school's task is easy. In other cases the school has to try and supply what the home fails to give, but it can never offer more than a substitute. Still, that substitute may be useful, and within the school the child should find a friendly atmosphere, and live a life where he is loved, and guided.

The physical care of the Infants' School child is nearly as important as that of the baby in the Nursery School. If the child has been well cared for, he should come to school at five having passed the most dangerous age of childhood ; if he has not received care he may already have contracted various diseases, rickets, sores, even bad teeth, and the school will be called upon to deal with sickness that is completely preventable.

As far as possible the Infants' Schools should be of the open air kind, and the ventilation and lighting should be a first consideration. So too should space. An Infants' School, like a Nursery School, needs space both indoors and out ; and the more its playground approximates to the Nursery School garden the better. If the school is not open air, windows should open right



out on to the playground. The tyranny of the wall, which at present stifles education, mentally and physically, should be broken down where ever possible, and nowhere would this destruction bring more benefit than to young children.

Besides fresh air and space, small children need other care for their physical well-being. The provision of milk in school is important. Training in cleanliness and good physical habits is essential, and careful supervision to guard against infection and preventable maladies. An Infants' School has failed in one of its chief aims if its children are sickly.

Closely connected with both morals and hygiene is a training in the arts. This may seem strange. The artist, frequently in literature, sometimes in fact, is an unhealthy, non-moral person. Books such as Murger's famous *Scènes de la vie de Bohème* which established the tradition of Mont Parnasse, and whose influence extended to England in a sentimentalised form in Du Maurier's *Trilby*, represent the art student of the past as gluttonous, nasty and unhealthy. Even to-day, when art schools are largely peopled by nice girls amusing themselves for two years before marriage, the artist or author is not always a very pleasant person. But the professional artist is one thing and the amateur another, and for once the balance is in favour of the amateur. The artist, in whatever medium he works, has to keep himself in a state of excitement. He does it in various ways—one of the least objectionable methods is by continually overspending his income. The result is a disordered personality and an inability to conform to the general standards of society.

There is an enlightening passage in Robert Graves' autobiography which indicates the relationship between poetry and nervous instability.

"War horror overcame me again. . . . I had bad nights. I thought that perhaps I owed it to Nancy to go to a psychiatrist to be cured ; yet I was not sure. Somehow I thought that the power of writing poetry, which was more important to me than anything else I did, would disappear if I allowed myself to get cured ; my *Pier-Glass* haunting would end and I would become merely a dull easy writer. It seemed to me less important to be well than to be a good poet. . . ."

Now this trouble does not afflict the amateur. His art is not of the high quality that is born of nervous tension, it is an outlet for feelings that might, if repressed, produce tension, or it is the beguilement of leisure. It is a relief of tension. It produces a calm and a sense of well-being. When a man has spent an evening contemplating the beauties of nature and trying to analyse them so that they can be reproduced, he is in an extraordinarily better temper. Children cannot be taught too young the proper interest in and attitude towards art. The arts that are suited for the Infants' School are Music, Painting, Modelling and Dancing. The last has a directly physical effect. Dancing is the best form of physical exercise, because it trains more than the mere muscles. It teaches poise and a sense of rhythm, while the music guiding and controlling the activity imposes a beautiful restraint. It has social elements, also, and lays the foundation for many of the activities of later

life. If the dancing is done in the open air the benefit is increased.

Music too has its strictly physical side. Singing is healthy, and especially if done in the open air. When combined with dancing it is best of all. Even the rather stupid singing games commonly played in school give children great joy. The Greek choric dances, so large a feature in states most carefully trained for war, where poetry of a high order was combined with dancing, must have been things of the greatest beauty and use. The simple accompaniment of a pipe was all that was then considered necessary.

The emotional and moral side of music and dancing is of as great importance as the physical, but it is less easy to describe concretely. But there is one aspect of it which is shared by all the other arts—it is an innocent occupation. There is much talk among educationalists and others of leisure and its proper use. The talk is often in exaggerated and metaphysical terms, but the matter can be stated very simply and in a manner which, if it seems unromantic is at least clear. The healthy man, and even more so the healthy child is essentially active. There must be periods of time when he is free from his work, and these periods need occupation. The arts are an extremely good means of filling these spaces in life. The writer has seen a miner straight up from the pit, wash his hands and face and sit down to play Bach, while preparations were being made for some other activity. Brigham Young, when he led his Mormons to Utah, established dancing and community singing as the regular evening relaxation. When men are singing or dancing, playing or drawing

they are doing nothing worse. Their activity may be positively beneficent—at least it is not harmful; and the advocates of the arts in life have this strong argument, that men and women occupied in them are not spreading scandal, grumbling, nor engaged in any other of the devil's acts that are wont to come to the minds of the idle. So too with children; in art, they are virtuously employed.

That is putting the case on the lowest level. The practice of the arts should produce a certain grace in the soul; but that it does this is harder to prove. Harmony of sound, grace of word, beauty of form should all have their effect, and the man who as a child has been accustomed to things of beauty should be incapable of hard meanness, a narrow judgment, or the commercial standard that sees no merit save in money.

Drawing and modelling have no physical advantages, but the former is an ideal amusement; and out-door sketching is as good as angling from the point of view of health, and less damaging to veracity. Moreover the practice of it, even if infrequent, leads to a heightened sensibility to beauty in the world about us, and to a deep contemplative joy in merely gazing at sunlight on copper beeches. Among all the pleasures of life those of sight fade most slowly. In many people they increase as time goes on. Nature does not lose the "glory and the dream", rather it becomes increasingly dear and miraculous. The indulgence of this pleasure brings no regrets, and does no man any harm. Someone has called it the only perfectly pure pleasure, the sole self-indulgence that is completely

blameless. It is consoling when puritan and artist can meet on common ground.

This may seem an adult standpoint to take up in regard to Infants' Schools. The small child cares little for landscape. The stupendous beauties of nature leave him unimpressed, It is doubtful if he even sees them. A boy of about five, taken by an earnest parent to see the Grand Cañon of the Colorado would look at nothing but a chipmunk on a neighbouring tree. But because the full appreciation is not developed there is no need to give up the attempt to produce the first stages of it. Merely living in lovely surroundings will do much to establish the taste; judicious teaching will do more. It is the curse of the town dweller that so much of nature is denied him.

The Infants' School is engaged primarily with the physical, moral and æsthetic sides of a child's life, but it must also teach him something of the matter contained in books. It often happens that most of the children who leave the Infants' School at seven can read, and do very simple sums in the "four rules." They should also be able to speak well and a few may write with reasonable coherence and fair spelling. Any other book information they may have is sure to be wrong, because so incomplete, and is more or less irrelevant.

In the process of learning to read children make a vast intellectual acquisition and synthesis. Language, one of the chief of man's possessions, they should largely have mastered in the nursery; but they have to learn to translate this language into conventional symbols. If we come to consider it with fresh minds

we cannot but wonder at the achievement. The ability to accomplish it is also one of the powers of the human mind which mature at a definite stage. One very noticeable example of this maturing of a power is shown in the attempt to arrange blocks of graded size in a series. A very small child is quite unable to do it. Over and over again he does it wrong, and seems to see no defect in his arrangement. Then one day he does it right, and from that time on the power is acquired and there is no further difficulty. In the same way the fundamental idea of reading, the representation of a sound and a thing by a visual symbol, comes to the child at a definite stage, and is quite divorced from a knowledge of the letters or the power to pick them out and name them. This latter ability may be perfect a year or so before a child can even begin to read in the true sense. These facts are very important in the teaching of reading and will be referred to again.

Number is another fundamental achievement and also concerns the understanding of symbols. The world of number has two aspects. There is the numerical quality of concrete things, "Two apples—one for me and one for Johnnie"; and there is the abstract series of conceptual relationships.  $r=y-x$  or "at the root of everything in the physical world lies the mystic formula  $qp-pq=ih|2\pi$ ."<sup>1</sup>

An engineer doing the calculations for a steam turbine passes from one aspect of mathematics to the other. He starts with his steam and his engine, leaves them to enter a world of pure abstractions, and returns in the end to his engine where he adjusts

<sup>1</sup> Eddington, *Nature of the Physical World*, p. 207.

an opening a 1/100th of an inch. The small child in the Infants' School has to learn to deal with these two aspects of number, and though the cases with which he deals are very simple, the essential mental process is common to all types of working.

These two accomplishments, reading—with writing—and elementary number may justly be demanded of the child at seven because they are attitudes of mind, pieces of skill like walking, which are essential for his further progress, and which in general experience are not impossible for his age. The subject matter of other branches of school work is as clearly unsuited to him. Man, his history or his travels, mean very little to the inexperienced child, he is quite lacking in the previous knowledge that would make him able to interpret in a true manner the facts which are told him, and the result is that the conceptions formed are either quaintly wrong or quite inadequate.

One body of knowledge open to the small child, if surrounding conditions permit, is nature study. This can be directly observed, and the doings of animals are in the main comprehensible to the young. But this nature study needs animals and plants actually growing and living. It is not a thing of diagrams and sheets representing the "Relative sizes of animals". It is only possible when there is country near or a garden. The wall and the concrete yard render it practically impossible.

Another field of knowledge far more universally open to children, is man and his works, not those of the past but the present, treated as simply as the activities of birds and animals. If it is interesting and

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instructive to watch a bird building his nest or a goldfish eating ant's eggs, it is equally interesting and instructive to watch a man working a steam roller or the postman clearing a pillar box. For some reason some teachers think that to watch the latter activities is waste of time and the former highly educational. But in truth the advantage, under our present civilisation, is with the works of man. The difficulty is that, strange as it may seem, a tadpole which has to be hunted and transported is considered a more convenient educational object than the human beings that surround us on every side. It may be not unkind to suggest that ignorance and prejudice influence the decision. Countless teachers can explain the metamorphosis of a tadpole who do not know how the electric light works; they boldly adventure on the flight of birds and know no more of an aeroplane than its shape in the sky, while the suggestion that makes of motor-cars are as relevant knowledge as types of butterflies is met by the remark that "The children would learn that anyhow!" It is just possible that this insistence on the remote may be defensible with men and women at the university; when dealing with children the remote is incomprehensible and uninteresting. A proper study of the familiar which after all is largely new to the child, may be the high road to interest and future learning.<sup>1</sup>

This account of the aims and probable achievement of the Infants' School may well produce a feeling that after all the children learn nothing; and that is to some extent true. The actual knowledge which could be

<sup>1</sup> This should be considered in connection with what is said later about "Projects."



reproduced in words by a child of seven would vary with the locality, but would in any case be small. What he would have acquired would be a number of skills. It is of the essence of skill that it is not easily put into words. In fact it generally *cannot* be put into words—as witness the depressing barrenness of most books on games such as tennis, and in any case, the verbal expression is not much help because we are not required to learn the words, but elaborate muscular adjustments or certain fine perceptions of eye or touch. In tennis the “timing” of a stroke is of the greatest importance. Yet it cannot be taught; it can only be *learnt*—by practice. Or in drawing, the ability to *see* the form is the essential thing, and, though much help can be given, only continual effort on the student's part will make him able to draw correctly. These skills are often slighted in education. Yet it is the skills that take time to acquire, and can only be fully learnt in youth. Any one who can read can acquire facts at the moment he needs them; but no skill can be learnt in that summary fashion.

The Infants' School child is learning skill. He should have acquired poise and grace of movement, the rudiments of musical ear and of the power to sing, and the first stages in drawing. He should also have acquired something of the intellectual skills of speech, and in a lesser degree those of reading, writing and number.

Besides these powers the child of seven should have learnt one thing more. He should have the power to work, and to make decisions for himself. The method adopted for teaching this is that called individual

work ; class teaching throws the whole burden of effort and arrangement on the teacher, and any initiative on the part of the children is discouraged.

Old books of kindergarten occupations contain instructions such as these for a lesson in brick building.

"Let each child take his bricks and arrange them ; all children starting and stopping the building of each line at the same time. The number of bricks in each line should be prescribed to *ensure uniformity*."

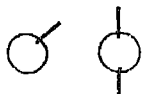
The true unacknowledged aim of class teaching is to secure uniformity, and in doing this all the more valuable aspects of training are lost ; and, in general, the uniformity is not achieved. Individual work is the common sense solution of an artificial difficulty. The talk that has attended its inception is merely proof of the ease with which custom hardens into a crust that can only be broken with a pickaxe.

The essence of individual work is simply that each child occupies himself with what he has to do, without constant supervision and regulation. So does a baby in the nursery, so does the child out of school, so does the adult. School instead of being cut off from other activities by an alien, and rather unpleasant limitation, approximates to ordinary life. Viewed today it is incredible that there should have been so much fuss made about the method, and still more incredible that it should still be mainly confined to the Infants' School.

But it is possible to understand some of the reasons which delayed its acceptance. Individual work needs several things. Children must be supplied with plenty of occupation. Left to themselves children

do a great deal more than when working under instructions adapted to the pace of the slowest in a group. There must be abundance of material. Nowhere is this more striking than in the matter of reading books. A class taught as a class may read one book a term, even one book a year; but children reading individually will read a book a week. The teacher has to make preparations for this much greater demand for material.

Secondly in individual work the material must appeal to the children, and be at least partly self-explanatory. Under the class system the most unsuitable things can be done with the most incomprehensible materials. In old books of Kindergarten method there is an extraordinary activity called *Pegging* which is much recommended for use with small children. The materials consist of peas soaked till they are soft and match sticks sharpened at both ends. The occupation is to thrust the sticks into the peas and form, not exactly patterns, but groups of elements. Thus stage I was one pea one stick, stage II two sticks one pea and so on. Anything



more meaningless and incomprehensible it would be hard to find. It was a possible class lesson; it would be impossible as individual work.

There is one further difficulty, that of organisation. Class teaching is simple in that the methods to be used have been stereotyped by generations of practice;

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and until recently the teacher herself had grown up under the class system and knew the routine from personal experience. To think out new methods required a considerable effort of imagination, as well as organising power. But nowadays a technique has been rapidly developed, and the method of individual work is found to be, as easy and far more efficient than the class lesson of the past.

The points that are really important in the management of individual work (after the supply of suitable and abundant material) are (1) the distribution and collection of apparatus (including its proper storing) and (2) the keeping of adequate records of the work done.

As regards the first point ; the apparatus for small children should be stored on shelves that are well within the reach of all, and every child should know where the different things are kept. Various points connected with these shelves and cupboards will be discussed later. Older children who work largely with books should each have a bag or box in which the materials in use at the time are stored.

The children should choose their occupations in turn, and it is a good plan to use this time—even with little children—as a training in silence and orderly behaviour. Work should be put away in a similar manner at the end of the period, and of course may be changed during the period. Whatever method is adopted—and this must depend on special circumstances—should be used regularly, so that the children form a habit of doing what is

required. Little children are as conservative as retired colonels, and it is of the greatest advantage to a teacher to enlist this conservatism on her side by following a routine.

With little children the actual supervision of the individual-work period requires constant attention and alertness, but not much settled method; with older children, who are doing sums, or writing, there is work to be corrected, and the teacher must have a very clear plan of action in her mind if she wishes to be efficient, and not lose her head in a swarm of clamouring children.

The second matter is the keeping of records. Individual work to be effective must be graded as carefully or more carefully than the class lesson, and a teacher should know where each child is in the scheme of work. This keeping of records is easiest in such a subject as arithmetic at the top of the Infants' School. Suppose a child is working through a set of cards; as every card contains sums of a slightly different character the record keeping is easy. If the teacher rules her book into columns for the cards her class is likely to use, she can then simply enter the date when each child completes each card.

Card.	A.	B.	C.	D.	E.	F.	G.	H.
T.B.	3 Apl.	5 Apl.	9 Apl.					
R.C.	2 Apl.	3 Apl.	4 Apl.	5 Apl.	6 Apl.	9 Apl.		
S.D.	4 Apl.	9 Apl.						

This kind of record shows both the point to which the child has attained in the scheme, and also his

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rate of work. Any slackening in the pace, due perhaps to a failure to understand a certain sum, is also shown clearly.

Many schools keep a large library of small books for reading, and then either the teacher or the child keeps a list of books read.

With younger children the apparatus is sometimes progressive, and in that case the teacher should keep a record of the child's stage, e.g., in much of the early number and reading apparatus there is a definite series of steps. Where there is no particular progression the teacher should as far as possible keep a record of the apparatus used, because it may be necessary to encourage a child to extend his scope, or to call his attention to an occupation that he has apparently overlooked.

Such records make it much easier to decide which groups of children are ready for special teaching. Individual work can never abolish instruction, and naturally it is better if this instruction is given to groups of children who are all at approximately the same stage. A teacher who has kept proper records should be able to pick out a group of three or four children for a short lesson every day, or two or three times a day. A teacher without records has to trust to a memory that may easily be defective.

In individual work as in all else the chief danger is blind enthusiasm. The method has numerous advantages; but then so have other methods, and the prudent teacher will try to find the best in each. Moreover, variety is often a powerful incentive, and a teacher should not consider herself so pledged to one

method that she cannot adopt any other. Thus at some stages a lesson—perhaps of only a few minutes—for the whole class is desirable. When children are learning the names of the arithmetical numbers and symbols there may well be a short class lesson on them. In fact, they cannot well be taught in any other way. In reading, a large number of methods are possible and should be used concurrently.

Naturally individual work has no place in many lessons, e.g., singing; equally naturally it is the only method in others, e.g., drawing. The teacher must use her intelligence in this as in all other matters.

### EXERCISES

- 1.—Discuss the moral training you would try to give in the Infants' School and say what methods you would use.
- 2.—What religious teaching would you give to small children? What steps would you take to prevent misunderstandings of ideas and stories?
- 3.—Discuss the pitfalls and advantages of individual work?
- 4.—What do you think of the use made of "apparatus" in any school that you know?

### BOOKS

Ed. Ballard

*Practical Infants' Teacher.*

Hodder and Stoughton. 1929.

This is a large book and should be consulted for types of apparatus, and for details of method.

Murray & Brown Smith

*The Child under Eight.*

## CHAPTER IV

### PREMISES AND EQUIPMENT



BUILDINGS which people make to do things in tell a great deal about the designers' ideas of the activity and its purposes. The modern pantry, or café, or picture house reflects the spirit of the generation that uses it, and all are signs wherein one may read the aims and ideals of the users.

When the object of Infants' Schools was to teach "the orphan boy to read, the orphan girl to sew," to rear children who should be seen and not heard, to develop strength of character by repression of what was naturally desired by the children, people built schools fitted to these aims.

It is not perhaps too far-fetched either, to read in the solemn rigidity, and heavy structure of the schools of the 1870's the sense of stability and steady progress, as well as the stern and, to us, ugly taste of that epoch. Rows of houses with terra-cotta window-frames and heavy machine-made ornaments over the portico, reflect the same spirit.



The social order was fixed. Boys and girls must be trained to accept the lot to which an all-seeing Providence had called them : above all they must obey and endure. The children of the "Board" and "National" schools were children of the "working classes". Mass production in schools matched mass production in industry.

So rooms were built to take ninety children. A teacher of five-year-olds had sixty or more arranged on the gallery, marks of which can still be seen on the walls of some of our old buildings. Each desk held eight or twelve children, each row rose eighteen inches or more above the row in front, and the babies climbed these steep heights by the stairs in the gangways. Desks had to be screwed down to the floor. Heavy wooden balustrades cut off the gallery from that part of the room which served as a corridor to another room—for privacy and quiet were not then esteemed of sufficient value to be provided for. The blackboards were large and heavy, the windows high and often shadowed by their deep surrounds. In many schools these windows survive to this day. Children once in their places had to stay there. Playgrounds were small. The usual place for latrines was across the yard—a wise enough precaution if the nostrils were not to be perpetually offended ; and it was always something of a disgrace to ask to "leave the room".

These old buildings were many of them built by religious bodies, and to this day they serve, with modifications, as schools ; for still those bodies that desire to give definite sectarian teaching to their

children must provide the building in which to do it, and ecclesiastical funds or ecclesiastical consciences do not always run to new edifices.

The worst of these buildings are on the "black list" of schools, and condemned by authority as unfit for places of education; and from time to time questions are asked in the House of Commons as to how much has been done towards replacing them.

The better ones are renovated and adapted. It is rare to see an old gallery, though less vicious ones of later date still continue to exist. Windows can now be opened. Playgrounds have been enlarged. In towns, at least, the latrines comply with modern sanitary requirements; though perhaps not with modern standards of decency.

Schools are equipped by the local education authorities out of public funds, and consequently the equipment is often better than the building. Old-fashioned long desks are disappearing from the worst Infants' Schools. In the better areas, dual desks are already regarded as antiques.

A good modern Infants' School reflects the modern attitude to children, and our conception of what the school should do for them. These aims are discussed elsewhere, and what follows should be read with reference to them.

The newest buildings are one storey high, and are preferably on the open air plan. The class rooms are built round a quadrangle, and two, or at least one side of the class room opens entirely by means of French windows on to the quadrangle or playground or garden. A verandah makes a covered way from room to room.

There is an assembly hall, and sometimes another large room for a playroom. The number of rooms is more important than at first appears, since the usual practice will be to have as many classes as there are rooms, so that the re-organisation of the school is apt to be dictated by the building.

The minimum amount of space allowed now for each child is ten square feet, so that a room for fifty children is five hundred square feet, but this is a *minimum*, and many people feel that with modern furniture it is not enough. Chairs and tables occupy more space than dual desks. Halls are generally one thousand eight hundred square feet or more.

The windows should be low, and have a wide sill on which children can arrange flowers and plants; and it is a good idea to build low cupboards into the structure of the partition walls, so that floor space in the school is not wasted.

The decoration of the rooms and windows is important. The older schools have become so accustomed to the pea-green wash and dark green tiled or painted dado that these colours, wherever met, still smack of a school interior. But at last it has dawned on the official mind that a school, like a house, may have rooms adorned in different colours. Little children notice and enjoy the change, and experiments as well as ordinary observation and common-sense show that children are healthier and brighter in rooms that are decorated in gay and clean colours. Future research may tell us amidst what colour the nervous child becomes stable, the lethargic child active, or the sullen child friendly, and colour clinics might add their

philosophies and fantasies to the swelling sea of Infants' School theorisings; but until that day, we we must trust our own likings and judgment. In a new Infants' School in a large and dirty town, of six class rooms, one was washed in primrose-yellow with sap-green dado, another in daffodil-yellow with violet dado, another with light blue and sand-coloured dado, a fourth with beech-green and blue dado, another with orange and shiny black dado, and the sixth in white with scarlet dado.

The same school painted its furniture, flaunted cretonnes on wooden surfaces that had gone shabby, and dressed its younger children in overalls—"as it were a mede". It was a pity that so much having been done, the local education committee could not arrange for the windows to be cleaned oftener. The smoke-covered, rain-ridged windows of the town school would blight all but those inured to a half-light which no sun can penetrate:

Since the use of latrines is now regarded as part of school training, these are now always built near to the main building and the way to them is covered so that children do not suffer from rain and cold. In some very modern schools the W.C.'s for each classroom are built adjoining it as they are in a Nursery School. This demands good sanitation and ventilation, decency, and cleanliness. Each closet should have half-doors which the child can close and bolt, but over which the teacher can see and put a hand to release a stiff catch. The seats and fittings will be suited to the size of the children. The chains to the water flushes should be useable by children,

and toilet paper will be provided and its use be taught as part of the child's training. Separate latrines are provided for the boys' use. The washing accommodation should be separate from the cloakroom. There should be hot and cold water, soap and towelling. It has been suggested that in some Infants' Schools in poor areas baths are as necessary as in Nursery Schools.

It is seldom that one sees a cloakroom arranged to fulfil all its requirements. It is clear that the clothes' pegs must be of the right height for the children, and that the room must be heated sufficiently to dry the clothes but not to bake them. Pegs are not always arranged so that each set of clothes hangs clear of the others. The air from the cloakrooms should be blown clear of the corridors and class rooms.

Most Infants' Schools are heated by hot water pipes and radiators, but no one has so far discovered how to put pipes round a room so that they are not ugly and not in the way. The American system of heating with hot air admitted through gratings in the lower part of the wall is less unsightly, but either from real taste, or from prejudice associated with the Underground it is not approved of in this country.

The rooms are equipped with chairs and tables for the children to use. The main thing to remember in choosing these is that they should be light enough for the children themselves to move, and that they should fit the children and each other. This means that the sizes must be graded. Dual tables are more popular than "foursomes" and if chairs make too much noise each leg is given a rubber pad. There

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with two years to spend in the top class instead of one year ; a situation which is undesirable for child and teacher.

When schools are being planned, the authorities would be wise to consider the whole situation at once. If they plan a Senior School with two classes in each age-group for a four-year course, they will need eight classes ; at the present reckoning of forty to a class, three hundred and twenty children. These would come normally from a Junior School also having two classes in each age group, and a four-year course—i.e. with classes of fifty, four hundred children. The odd eighty would be transferred to Secondary and Central Schools. This again means that to feed such a school there should be an Infant's School also arranged in two classes to an age-group, with a course covering two years (excluding the "under five's") ; so that such a school would normally contain four classes of fifty, i.e. two hundred children. The very usual practice of building an Infants' School and Junior School as two storeys of the same building, identical in size and shape makes organisation very difficult.

To solve the difficulty thus created by unpremeditated building, the schools, instead of being organised in an Infants' Department with a two-year course and a Junior Department with a four-year course, are split into two three-year courses, with Standard I in the Infants'. For organisers generally seem unwilling to allow a Department to overflow from one storey to another.

It is impossible to doubt that this is the true reason for the presence of Standard I (the seven-eight age

group) in the Infants' School, and all the elaborate educational theories that have been evolved to justify the practice are merely camouflage of the actual situation.

Many Infants' Schools like to include a Standard I, but they are schools that still adhere to the old notion that the virtue of an Infants' School lies in the children's measurable achievements in reading, writing and arithmetic; and further, headmistresses facing the problem of declining numbers naturally support a system which keeps up their roll and their salary.

The objections to Standard I in the Infants' Department are the results of observations of those with wide experience. A school tends to take its tone and its pace from its top class. In Standard I definite teaching and testing in primary subjects is possible and desirable, and the goodness of the school is frequently measured by the children's abilities in these subjects. If Standard I is in the department, the teacher of the five-year-olds already has her eye on what will be expected of her children at eight, and she cannot refrain from pushing them, whether they are ready or not, along the lines leading to what Standard I must do. Now the object and aim of the Infants' Schools, in modern theory and in the best of modern practice, is not achievement in the three R's, but in certain powers and control of body and certain attitudes of spirit and mind. When only fives and sixes are in question, these aims seem more convincing, and the school, in actual fact, takes its pace and its ideals from the babies' class, and not from the top class. It is remarkable, in this connection, what a

healthy influence the presence of a good under-fives' class will have on a school unhampered by the exacting presence of Standard I.

The question of classification by age has also been raised. This is now the generally accepted principle, and depends for its success on the children working at individual tasks and in groups. It is probably better for a bright child to broaden and consolidate his experiences at each stage of his career, than for him to rush through a series of classes rapidly, learning to do the "tricks" quickly with only limited application of them. Thus at the Infants' stage, a clever child of six will soon learn to deal with all the word-matching apparatus that is provided to teach the beginnings of reading; but it is better for him to continue in that class, working on at his own pace with easy and graded reading material, getting confidence and speed and accuracy, than that he should be pushed up into Standard I where he will encounter all kinds of new material and incidentally quite a different method and spirit.

It is of course essential that there should be abundance of material on which a child can work. Too often a teacher can think of nothing beyond the actual syllabus of the class and a quick child kept a year in one class wastes time and loses interest in repeating endless examples of a type of sum he completely understands.

If a school has two classes in each age-group, the brighter children are generally grouped in one class, and the slower in the other. But at this early stage all kinds of causes operate to make a child seem bright or dull, and great harm can be done by coming to



over-hasty conclusions. Epidemics, bad sleeping and housing conditions, dirt, improper feeding, all have very marked effects at this stage ; children, moreover, seem often to develop at an uneven pace rather than to progress steadily.

Classification and organisation are affected also by the conditions of admission. Some schools admit only once a year. In that case progress through the school is steady, and promotion easy. Some schools, especially in crowded slum areas, have a waiting list, and admit and promote as room is made by children leaving at the top of the Senior School. In this system there is always a trickle of promotion going on, and very unsatisfactory breaks occur in individual children's progress. In schools again where the numbers are falling, the head mistress is only too ready to admit at all times in order to keep up her total. Cases of this latter kind do not matter so much to the school as a whole, as generally only the babies' class is affected, and here a newcomer easily fits into the individual work arranged for the children.

Whatever the system of classification in use—but especially in cases where children are admitted at odd times—it is essential to keep accurate records of each child's progress. These records take all kinds of forms—from the official card-catalogue kept by the teacher and unintelligible to the children, to picturesque "ladders" or other symbols, on which the children themselves can record, or, at any rate see the record of their progress. In many schools, both private and public records are kept. The head-mistress keeps the cards with the medical record,

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and details of parentage and age which are entered in official registers, while the teacher keeps class records of what phonograms Annie Jones can recognise, and whether Johnnie Brown can or cannot analyse the number 5.

Since in sense training, reading and writing and number each child progresses at his own pace, the schemes of work in these subjects give an account of the stages through which each child will progress, and each scheme may not be confined to one class. A backward or dull six-year-old may still be doing the same work as a normal five-year-old, although he may be in the sixes' class. Incidentally when he is promoted to the Junior School, his record-card should go with him. All that the Junior School has a right to ask of the Infants' School is that each child shall have been given work according to his capacity. It cannot expect that all the children will have reached the same standard in any or all subjects.

Schemes of work in subjects which are taught to groups of children, such as singing, stories, and games might well be more helpful than they are. As a rule the head mistress makes them, and, anxious to leave her staff free to make their own choice of particular stories or songs, she is purposely vague and general, with the result that weak teachers retain their limitations in the selection of material, and even good teachers, through ignorance of what has been done in a previous class, repeat what is already familiar to the children. The solution would seem to lie in clearer and more definite schemes of work prepared by the head mistress in co-operation with the teachers.

In Junior and Senior Schools, the quality of the children's achievement and the teachers' success is tested by the head teacher, usually by examination. In the Infants' Schools, examinations are out of place, but a good head mistress of an Infants' School knows her staff and children better than most heads of other departments. This may well be because she is always looking for qualities more fundamental than performances in the three R's. She sees that Miss A's classroom is always pretty with flowers, that the furniture is arranged so that the children can and do move about freely, that they seem always busy and always happy, and especially self-reliant. She notices that they are friendly and responsive when she goes into the room, and behave as though they had always been treated kindly and courteously, and expected to give and receive no other kind of treatment. She sees that the equipment for their performance of tasks is clean and pretty and carefully graded; and she gives Miss A. a good mark. This judgment, based on the daily observation over a long period and entailing a careful consideration of standards of values and of nice adjustment of means to an end, is more reliable than an examination which at best is an artificial thing.

It is rare that one finds specialisation in a subject by members of the staff of an Infants' School; for the main problem of training rather than imparting information demands constant and continuous oversight by the same person. But in some schools mild forms of specialisation have been tried with some success. Thus in a school where one teacher is particularly

good at games and another at stories, classes have been re-arranged so that each class gets the benefit of being with these teachers once a week. No one ought to be on the staff of an Infants' School who cannot make music somehow, if only on a drum or a whistle; but if there be such, then they have been helped out by other members of the staff who are better equipped.

The making of a time table for the Infants' School is on the whole simpler than for other departments since its work is less differentiated and therefore less split up into "subjects". Also the activities are repeated daily so that a time table is much more of a "daily programme". But where a playground is shared with the girls' department, as it often is, where there is a hall, or only one piano to the department, activities have to be arranged to give every child a fair share of these amenities. It is seldom that the playground and the hall are used to their fullest extent, even by Infants' Schools which complain about lack of space. It should be the purpose of whatever the time table says—of the teacher's plan—fives at any rate, to take advantage of all the light and air and space available. Number is better taught by playing "number games" in the sun, than by sitting in a stuffy room over bits of apparatus, however ingenious.

The names that appear in an Infants' time table are labels for activities which vary greatly according to the teachers, but speaking generally, rest, work, games and singing, hygiene and social training, and work in the three R's are the main topics.

# ORGANISATION

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Class	III. Lowest Class	9.30-9.45. Language.	9.45-10.35. Individual work in 3 R's.	11.11.30. Music and Dancing. <sup>1</sup>	Instruction, 11.30-12.	Washing, 1.30-1.45.	Language and Tale, 1.45-2.	2-2.45. Handwork or Gardening or Drawing.	Recreation, 2.45-3.	3-4. Acting or Story or Games. <sup>1</sup>
Class II.		9.30-10.5. Music and Dancing.	10.5-10.35. Individual Work in 3 R's.	11.11.30. Individual work.	Religious	Lunch and Recreation 10.35-11.		2.0-2.45. Acting. Story. Games.		3-4. Handwork, etc.
Class I.		9.30-10.5. Individual Work in 3 R's.	10.5-10.35. Music and Dancing.	11.11.30. Acting. Story. Games.				2-2.45. Individual Work.		3-4. Handwork, etc.
Class III. Class II. Class I.		Hygiene.	Lang.	Music & Dancing.	I.W.	Handwork, etc.	Story, etc.	Rec. and Lunch.		

<sup>1</sup> These titles include physical training; see also Board of Education syllabus of Physical Training for young children.

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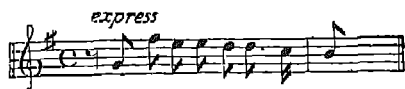
suitably distributed with intervals for free play and recreation.

Above is a suggested time table. It is intended to be elastic and provide alternatives for wet and dry days, Summer and Winter, as in the case of handwork, gardening and drawing. It is also intended to show the comparative place that the formal subjects should take in the day's activity. It is intended that the programme should be the same every day of the week.

### EXERCISES

- 1.—Plan out a set of Schools, Nursery, Infants', Junior, Senior and Secondary, for a district in which about 150 babies are born every year. Indicate numbers of children in each department and say how many and what rooms you would have in each department.

## INTRODUCTION



This means that the mechanical acquisition of the three R's takes an inferior place in the Infants' School, both in time and thought. But if we are not going to occupy ourselves for the major part of two years with the rudiments of reading and number we must think of something else to do instead, and this is where we have failed. Schools have continued to teach reading and sums because they could think of nothing

"Upstairs" is a reference to the type of three-decker school so commonly built in 1900-1910, where the infants occupy the ground floor.

better. It is proposed to suggest the activities which could and should supplant reading and number for a large part of the time at present devoted to them.

Moreover, there is another point to be kept in view. Although school days are a preparation for later life, they are also life itself at the time. There must be a remote aim, there must also be the occupation of each moment as it comes, and that moment-to-moment life must be pleasant. It is possible for an adult or even a child of ten or fifteen to work at a subject which is not in itself pleasing, in the hope that the ultimate results will be beneficial. In doing this the worker is supported by a glow of hope, a conscious virtue that renders the whole experience desirable. A little child is incapable of this foresight. He cannot see beyond the hour, and what is not enjoyable now is loss to him in his life.

Nor does the harm end there. Almost certainly we acquire our main attitude to life when young. The kindness which has surrounded our youth mellows us for the rest of our days. Harsh treatment of children makes hard, cruel men and women in the next generation. A few outstanding characters resist, but on the whole early impressions are most durable. The same holds good of learning. A child who has found the first stages of school full of delight is not likely at a later age to desert knowledge or to close his eyes to the interest and attractions of the world about him. We have got to teach suitable subjects and teach them in a suitable way.

The best corrective to an excess of educational theories is the conversation of a child starting school.

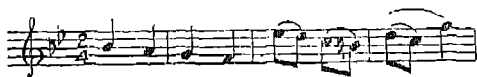


The majority of modern children love school, and cannot be kept away : and so far the school is successful. It is surprising to what unlikely matter children apply themselves with enthusiasm. The twice times table can apparently open realms of delight to a clever infant of five; but the enjoyment and pride are largely those of achievement. What he likes is reciting his knowledge under approving eyes, and when the teacher adds a sweet to her commendation the satisfaction is complete. On the other hand, there may be quick criticism, and another clever child remarked about his teacher's exposition of a coal mine: "I don't think she knows much about it, but the school says we've got to do it, so we do."

Little children are eager, active, full of zeal and zest, and their happiness is made up of small things. The Infants' School should make that happiness its fundamental concern.

## CHAPTER VI.

### HYGIENE AND SOCIAL TRAINING



Art and Nature thus allied—



Go to make a pretty bride

It is only necessary to walk through the slums of any one of our great industrial towns to realise what must be the foundation and beginning of any sane education for the children of these areas. Tenement houses of six rooms harbour as many as six families—twelve adults and nineteen children.<sup>1</sup> There is one tap and one lavatory. There are streets of houses of two rooms—a bedroom and a scullery-kitchen—opening directly to a narrow alley-way, in which stand the dust-bins, full to over-flowing, and all the houses over-crowded with lounging, busy, infant or dying humanity. In room after room, the bed is the only flat space available as a dining table, and the children cannot go to sleep in it until the family has finished dining on

<sup>1</sup> These figures are taken from a recent survey in an industrial town.

it. Amongst the lumber and litter, the noise and filth, the endless jostle and foetid air, the small child cannot learn to be clean, to be mannerly, to develop those habits on which his health and comfort will depend; and, uphill and unsatisfactory as the efforts of the school must be while such housing conditions continue, these efforts are of paramount importance in the Infants' Schools.

In better areas, the problems are less acute, or are more easily and successfully dealt with. The children come to school clean and well-fed, and the parents can co-operate with the teachers in training the children in healthy and pleasant manners. But even these children surprise the inexperienced by their sudden exhibitions of barbarous or unsocial behaviour. Jim, aged five-and-a-half, from a clean and most mannerly home, suddenly poured his cup of milk inside his jersey and flung his bread and butter at another boy. Mary, of the same age, having learnt how Red Indians paint themselves, proceeded to do likewise with the jam in her lunch sandwich.

But the school is not merely concerned with the correction and eradication of bad manners. Children often come to school ignorant of how to take care of themselves in many ways; to wash and dry their hands, to button their clothes, to manage themselves in the latrines, and especially to consider the needs of other people.

Schools vary enormously in the amount and kind of training that they can and do give in this matter, and the necessity for this training is the strongest argument for the provision and equipment of good

buildings for infants, of whatever creed or rank of society.

If there are two or three classes, each of fifty children in one room, if there are but two or three unpleasant looking wash-basins with only cold water available, and no adequate cloakroom space, if latrines are some distance away across an open play-ground, and if these are old-fashioned and malodorous, if the windows are high and dirty, and when opened let in unbearable street noises or the stinks of adjoining tanneries or pickle factories, then the teachers can scarcely be blamed for turning their attention away from training in hygiene to the three R's., to whose abstractions bad physical conditions seem to offer less resistance.

But if the school building allows, or if the teacher is convinced that in the face of obstacles she will give this necessary training in hygiene and social behaviour, what can she do ?

Healthy and pleasant behaviour is partly a matter of habit, and partly a matter of standard. If a child does an action repeatedly, day after day, he will soon do it without debating whether he should or should not, or with very little suggestion from anyone else. The action will become habitual. If he finds that a certain bearing towards his fellows is praised and wins him respect and affection, he will pursue that. If he is accustomed to fresh air, he will feel uncomfortable without it. Nothing is more surprising to the uninitiated than to see the unruly disobedient gutter-snipe of five become almost at once a quiet obedient member of a babies' class—a transition due almost

entirely, perhaps, to the suggestion of the "herd" or group in which he finds himself; or to see the child from a crowded stuffy home enjoying, as though born and bred in it, the cool breezes of the open air class room. These two factors, habit and custom, work together. The behaviour of the group suggests the actions, and makes the repetition of them easy for the individual child.

The most important set of habits to establish are those on which good health depends. Simple talk about these to little children is not amiss, and various suitable posters and pictures are issued in connection with various local and national "Health Campaigns"; but the only reliable method of training is to see that the child does regularly the things that the teacher wishes him to learn to do.

The amenities of the nursery class are unfortunately not carried on to the other classes of the Infants' Schools. As a rule children of five and upwards are not given opportunity to clean their teeth or wash themselves regularly every morning. In some districts, of course, it is unnecessary that the school should deal with these particular activities, since the mothers see that they are done properly at home. But in slum areas there is need for a great deal of assistance, and where the home cannot or does not provide facilities, the school should provide them.

This applies again to the matters of sleep and use of latrines. In slum areas large numbers of the five and six-year-olds are heavy for want of rest and sleep. Yet provision for afternoon's sleep ceases at five, whether the particular children need it or not.

Again, in a well-housed population, the children have ample opportunity to defæcate regularly before leaving home. But in the conditions described earlier in this chapter, it is most improbable that the children will have had any such opportunity. The result of this is that a great deal of the effort and money spent in medical service in and out of school is devoted to eradicating the effects of constipation. It is therefore the duty of teachers to tackle the problem fearlessly and sensibly, and see to it that children who need opportunity in school time should have it. Toilet paper should certainly be provided. Most local authorities now provide it on requisition. If the children cannot be trusted to use a roll without wasting it, bundles of a dozen or so sheets can be hung up in the closets every day. If the schools are used at night for evening classes, the bundles can be collected.

Nearly all the children will use the closets for urination some time during their school day, and it is a very important part of the teacher's work to see that they use them in a seemly and cleanly way. Where the latrines are built not far from the classrooms, the teacher can supervise easily what is going on. There should be individual and separate water-flushes, so that the child can learn to use these. With the old fashioned trough or automatic flush the caretaker takes all the responsibility, and no training is allowed for the children. During play-time it is essential that a teacher be on duty, and that she prevent the children crowding into the closets as they will do if left alone.

In no case should the boys' latrines be in the same passage-way as the approach to the girls' closets. We may argue, of course, that privacy in these matters is merely a national peculiarity and that there is no need to perpetuate standards which the south of Europe thinks to be quite unnecessary ; but one feels that unless freedom in these things becomes so common that all self-consciousness vanishes, and unless we are also willing to accept the manners and customs of other countries, children must be taught from the first to regard what is called decent behaviour as normal. There will, of course, in many cases, be a vast gulf between " normal " behaviour at school and the only possible " normal " behaviour at home. But that it is possible to develop a higher public standard of behaviour in physical habits is shown by the pleasanter behaviour of people of all ranks in public places. It has been remarked more than once that whereas thirty years ago to travel in a third class carriage was to suffer torture from the frequent spitting and worse of one's neighbours, now one seldom suffers such inconvenience, despite the allegations of a certain M.P. regarding the journey from London to Aberdeen.<sup>1</sup>

So in the Infants' Classes, the proper blowing of noses, the hygienic management of coughs and sneezes, can become habitual. Life is healthier so, and far pleasanter for children and teacher. Many schools have a show of handkerchiefs every morning and afternoon, and perform handkerchief " drill " as part of the opening routine. Paper handkerchiefs are kept in stock for defaulters.

<sup>1</sup> The gentleman in question described it as " Hell."

It should also become habitual for children to look at their hands before they eat, or before touching soillable material, and if the hands are dirty, to wash them. Again, some teachers take a show of hands routine. It is better if the child can be trained to take over the responsibility of inspecting his own.

There are, of course, only too many cases of children being dirty in ways they themselves cannot remedy, despite the great improvement wrought by regular visits of the school doctor and nurse. The latter usually visits town schools about six or eight times a year; the child is examined by the doctor three or four times in his school career. Parents can be, and usually are present when the children are examined, and advice is given as to means of cleansing verminous heads and bodies. But in crowded tenement houses there is little opportunity for regular bathing, and when clothes and soap are expensive, there is very little chance of the child being given enough clean underwear. Teachers still find children sewn into their clothes for the winter, and to hundreds a separate garment for night wear would be an unheard-of luxury.

Now satisfaction in a clean and cleanly-clad body is an acquired taste. No one who is not used to it desires it, least of all children; so that if we think that children really should bathe regularly (which is, after all, but a recent development of human fashion in North Europe) we should either provide means in the homes, or baths in the schools. The senior children go to swimming, and, in some towns, the boys at least bathe naked, and are made to soap themselves all over



and wash before they go into the swimming bath. Such cleansing is denied to small children.

But clean hands and face and tidy hair are within the child's own powers. Hot water should be available, and low basins that they can reach easily, and clean towels. The communal towel is unhealthy. The paper one is popular in America, but is more difficult to use than a cotton one. There are taps with levers that have to be held while the water flows, and which turn themselves off automatically when released. With all their advantages, it can still be urged against them that they are so different from those in use outside school that the children miss the chances of learning to use ordinary common apparatus well.

There should be a mirror hung where the children can see themselves full length, and the teacher might well keep a comb (dipped in antiseptic) for use if necessary.

Another set of personal habits which schools have recently taken to training are those of eating and drinking. Custom was that the children ate their lunches in the playground (or in school in rainy weather) as rapidly as possible and in any manner they thought fit. Good Infants' Schools now use the mid-morning meal as a means of training, and time for it is allowed in the time table, even in the classes for five- and six-year-olds.

In many areas the children are provided with a drink at the morning "break," usually milk, or some artificial milk preparation. If the former, the custom is for the children to suck it from a sealed bottle (one third of a pint) through a straw. If the latter, the

makers supply apparatus for heating and making the food, and the mugs from which it can be taken. For the former practice, it may be said that the milk is probably more nourishing than the artificial food, and that it is good for children to acquire a taste for fresh milk. But it is more expensive than its rival in the schools. And further, if served in the bottle and not in mugs, it offers no chance of teaching children good table manners. Many Infants' teachers, frequently in the fives, sometimes also in the sixes, let the children spread their tables with cloths, set out vases of flowers and mugs and plates, and then serve the prepared drink, pouring it from small jugs into the mugs of the group at each table. Lunches are unwrapped, set on the plates, and grace and order ensue, following in the steps of the Nursery School. The washing up is done by the children themselves, usually working by turns in sets. This provides not only useful social training in co-operation and sense of responsibility but is also useful sense-training and moreover, since it is a "grown-up" activity, the children love it. Even with the "bottle" system it is possible to arrange for lunches to be eaten decently and for the children to feel there is time to take their food in a leisurely manner.

It is often necessary to keep some watch on the amount of lunch that the children bring to eat, when they are also provided with milk or patent food. Some children bring enormous quantities of bread, even meat sandwiches, and this plus the milk is far too heavy a meal to take between breakfast and dinner, and might easily upset their digestions, or take away

all appetite for the later meal, and so derange other desirable habits. Some head mistresses wisely invite parents to a meeting and explain the purpose of mid-morning milk and how it largely takes the place of the heavy solid lunches.

The unfortunate part about the school feeding is that the poorest children who need it most cannot afford to pay for it, and, unless the school staff or the local authority is generous, they look hungrily on while the well-fed ones feed yet more.

The clearing away of the meal, and collection of any papers or sweeping up of crumbs, is part of the children's general training in tidiness. They can be led to take a pride in the appearance of their room. They dust and tidy it with the best will in the world, and if window-sills are conveniently low, they delight in arranging flowers there, changing the water for them, and making all as spruce as they can. Even the fives can take their share in this, and will proudly show to any chance visitor the latest achievement of their handiwork.

As with cleanliness, people's liking for fresh air is a custom but recently established—and even now only partially so. The children should be trained to look at the windows every morning and afternoon, and they might be made responsible in turn for telling the teacher if the windows are not open. Whenever and wherever possible, lessons should be taken in the outside air, and certainly the five-year-olds need more than one opportunity during a morning or afternoon for a "free run" in the playground. The modern idea of providing Infants' Schools with gardens should

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help much in inculcating a liking for being out of doors, and a habit of being there whenever possible.

As in all other aspects of training, the teacher herself must be an example of what she preaches. If the children's tables are to be clean and tidy, so must teacher's desk be; if their hands are to be clean, so must hers be, and she need not hesitate to let them see her washing them when necessary. A clean gay overall quite obviously pleases the children, as does also a healthy fresh appearance.

In short, it is just as essential for a teacher as for a nurse or an assistant in a fashionable store to be scrupulously clean and attractive in person.

### EXERCISES

- 1.—Describe what you would do to try and improve the cleanliness and manners of a class of slum children aged 5 or 6.
- 2.—Describe what you would do about morning lunch with the same class of children.
- 3.—What can be said in answer to the contention that the schools act unwisely in "relieving the parents of responsibility for their children"?

## CHAPTER VII.

### WORDS AS COMMUNICATION



MAN's life is so firmly built on words to-day that it is difficult to imagine a state in which they do not play a preponderant part. We even teach our animals to understand at least a part of our speech; and that animals do truly understand the words, and not merely the tone of the voice is shown clearly when we cross the Channel, and find dogs and cats who do not know English and require to be addressed in their own tongue. In the same way we teach our babies, and the child grows up continually hearing and influenced by words.

The learning of language is one of the great achievements of a child's first five years. This learning involves (a) the apprehension of the idea of language, i.e., the representation of a thing (idea, emotion, etc.) by a sound. This is not easy and only comes to the child gradually. There is a passage in Helen Keller's autobiography which describes the sudden apprehension of the function of representation; though in this case it was touch and not sound.

"We walked down the path to the well-house . . . some one was drawing water and my teacher

placed my hand under the spout. As the cool stream passed over one hand she spelled into the other the word *water*, first slowly, then rapidly. I stood still, my whole attention fixed upon the motion of her fingers. Suddenly I felt a misty consciousness as of something forgotten—a thrill of returning thought, and somehow the mastery of language was revealed to me—I knew then that ‘w-a-t-e-r’ meant the wonderful cool something that was flowing over my hand. That living word awakened my soul, gave it light, hope, joy, set it free”.<sup>1</sup>

The average baby passes this stage quite early, and long before it can talk knows a great deal of what is said to it, and understands the meaning of many words.

(b) The forming of words and later their combination into sentences.

This is an intellectual process, and the adult can gauge its difficulty by reflecting on his own struggles with a foreign language.

(c) A physical side which consists in learning the very delicate adjustments necessary for clear articulation.

Teachers should not forget that all these elements exist, and often need separate cultivation; and when a child has come from a home where little care is taken of him, or where the speech of his parents is bad, very great attention is needed in all or some of these elements.

Many children learn to talk easily; they have scarcely grasped the idea of language fully before it

<sup>1</sup> *The Story of My Life*, p. 23. Harrap, 1923.

is ready to their tongue. Others learn slowly and in their case the mental processes involved become clearer.

The more normal child learns without many troubles, and learns those words first which represent concrete things or actions which he desires. Frequently a child's first word, after the meaningless da-da, ma-ma stage, is "*more*" and the second is "*no*". He then goes on to nouns or pseudo-nouns. These are the names of things he wants or of objects that interest him. The exact words used depend on family teaching, but the probability is that a large proportion will be concerned with food, and another large section with people in his immediate surroundings; like "Mummy", "Aunty" and the domestic cat and dog.

This vocabulary which is used without grammatical structure rapidly increases, but the next stage comes when the child begins to learn the combinations of words into sentences. Even in English, which is not heavily inflected, this presents real difficulties. Sentences such as "A cushion. I sit on it"—are an attempt to deal with such difficult forms of words as "Here is a cushion. I will sit on it", or the yet more difficult "Shall I sit on this cushion?" The child at this stage works very hard to learn. A backward child of two may talk very little, but when he does achieve a combination of words, e.g., "No more, Nanny," he will go on repeating it over and over to himself or the room, rejoicing in his linguistic victory and consolidating this achievement for future use. A more advanced child is also in the practising stage at about the same age. Sitting beside you on

the floor he tries to thread beads on a piece of catgut, and keeps up a continual babble of talk which is not intended to be answered, or indeed to fulfil any purpose except personal practice. The talk is after this fashion :

"Where's the neego (needle) ? "

"It won't go through. Why won't it go through ? I haven't cut it off. That's the neego. Where's it gone to ? " and so on indefinitely

Four months later he is learning phrases by the same process of repetition, and questioning; only now he asks his questions not merely for the sake of practice but in order to learn the phrase in which you answer him.

John, watching the boats coming along the river said :

"What's that ? "

"A punt."

"What's the man doing ? "

"Pushing it along with a pole."

"Why ? "

"To enjoy himself."

And so on for boat after boat. At last John says : "Is that man in the punt to enjoy himself ? " The phrase has been learnt, and the irritating repetition justified.

This stage passes away as the child acquires the general forms and phrases of speech. Imitation becomes readier, there is less need to force his companion to endless repetitions before the phrase is mastered; and the child himself has less need of practice. He can, if need be, remain silent without



detriment to his development. In place of the other process, there follows the learning of individual words either through their use in various contexts or by direct explanation. Both methods have their advantage, but knowledge gained by the latter method must be very uncertain. John was listening to a record of Kreisler playing "Humoresque". His companion said to him "That is a violin. Do you know what a violin is?" "No, I *don't* know what a violin is," was the answer, and the explanation was obviously insufficient.

The size of a child's vocabulary when he reaches five or so is determined by natural ability and also by training. The normal child of attentive parents living in a good environment should know the greater bulk of the words in common use. It is unlikely that he will know technical words, but he may well know such words as the names of the garden flowers, and of common birds. The precision of some small children's vocabularies is often a surprise and rebuke to the adult.

There was a picture in *Punch* which represented a nurse saying to a fretful child of three or four: "Look at the pretty dog, Billy," and the child answered, "Do you mean the fox terrier or the sealyham?" The same thing can happen in any field, and children are undoubtedly proud of their linguistic skill. To disconcert the grown-ups by knowing an apt word is no small score for a child who generally has to suffer a position of inferiority.

In this whole matter of learning to talk a child shows high intelligence, and learns by comprehensible

stages. First come the isolated words, always closely connected with the objects they represent ; then sentences continually improved by repetition. The child repeats them to himself, and he forces you to repeat them to him ; and when, through imitation, he has acquired the structure of the language, he learns by analogy other and more remote words and phrases. It is the acquisition of these and their inapt use during the process of repetition and experiment that produces most of the " funny sayings " of children, as well as the foreigner's howlers when learning your language.

One very interesting side of language is the beginning in the child of connected narrative ; small children find this very difficult or almost impossible. The reason is partly that they do not know the words and partly that the effort of organising ideas is beyond them. Yet they are willing to try quite early. The " stories " given in an earlier chapter show the first efforts in this direction.

Older children, when they have not acquired the power, usually take refuge in silence and refuse to make the attempt that they feel is foredoomed to failure. They will only answer direct questions, which is far easier, and thus are in some ways wiser than the adult, who, though he cannot tell a coherent story, will generally talk himself into a flood of irrelevances.

An interesting comment on the difficulties of a connected narrative is afforded by the practice of the law courts where the counsel usually " examines " his witness, drawing the story from him in a series of answers to definite questions ; yet even with this

precaution a witness has frequently given away a case by a burst of irrelevance or incoherence.

The third factor in speech, pronunciation and articulation, causes no trouble to the child who comes from an educated home. He learns simply and by imitation how the words should be said. Naturally this takes time, but by four or five years old the child should speak clearly and correctly. To the intelligent child this process of learning is amusing, and can be made the object of experiment. One child of two failed to pronounce the final *ll* in such words as *ball*, *wall*. One day he asked for his *ba..*, and was told, "Say *ball*". He tried, imitated his teacher correctly and then said "*wall*" in the same way. Then he grinned in a characteristically mischievous way and said, "What would it mean if I said *ba..*?" The adult tried to avoid this question, but on being pressed took the sound as "*bore*", and told him. Then he tried *wa..* and it was taken as "*war*". Thus instructed he was contented.

There is no intrinsic reason why elementary phonetics should not be as interesting to the child as they are to the adult eagerly trying to master a language such as German, which involves sounds which are not usually made in English speech.

The implications for teaching of this progress to language are clear, and can best be discussed in the order of the topics already taken. It is certain that the Nursery School, and probably the Infants' School will have much to do with the speech of the children. The task of the school will depend very much on the homes from which the children come. A good home

does more than teach the children to talk, it makes the children extremely anxious to learn. It is the apathy in the children, due mainly to bad home conditions, that renders the school's task difficult. In the East children in many Mohamedan homes are brought up with their mothers in Purdah. This means that the small boy or girl sits all day in a room, or on a back verandah looking on to a small court, doing *literally nothing*. So sit the mothers—so the children. They suffer physically from lack of air and proper food, and mentally they are blank. When these children are sent to school at five or so they not only know nothing, but have no impulse to learn. It takes often months of patience before the school can wake the smallest spark of intellectual activity. Very few English children come from quite such unfavourable surroundings, but many come from homes where very little has been done to encourage thought or effort. At the beginning of Leon Trotsky's *Autobiography* there is a passage about the childhood of different classes in the community which is worth pondering in connection with children in school.

"Childhood is looked upon as the happiest time of life. Is that always true? No, only a few have a happy childhood. The majority of the people, if it looks back at all, sees, on the contrary, a childhood of darkness, hunger and dependence. Life strikes the weak—and who is weaker than a child?"

My childhood was not one of hunger and cold. My family had already achieved a competence at the time of my birth. But it was the stern competence of people still rising from poverty and having no desire

to stop half-way. Every muscle was strained, every thought set on work and savings. Such a domestic routine left but a modest place for the children. We knew no need, but neither did we know the generousities of life, its caresses. My childhood does not appear to me like a sunny meadow, as it does to the small minority ; neither does it appear like a dark cave of hunger, violence and misery, as it does to the majority. Mine was the greyish childhood of a lower-middle class family, spent in a village in an obscure corner where nature is wide, and manners, views, and interests are pinched and narrow."

The child from a favourable environment will come to school chattering with all its powers, so intent on learning to talk that the school will have little to do save allow it the opportunity to learn. The child from a family where it has been neglected or discouraged will need to be helped to talk. The school should thus make provision for both types of children. In the first place children should not be prevented from talking except in such a lesson as story, and then they should be allowed to ask relevant questions, for instance, about the meaning of words. A teacher who finds herself interrupted by such a question as "What is a forest?" in the middle of "Little Red Riding Hood" should answer as quickly and accurately as she can ; and feel great satisfaction that she has got a child sufficiently intelligent and interested to want to know. At other times, especially when the children are doing handwork, playing with their toys, or doing individual work they should always be allowed to talk. This talk often seems very foolish to the

outsider. Much of it is mere monologue and repetition, sometimes addressed to someone, but not requiring any answer or making any contact with the external situation. Piaget gives examples of this kind of talk. P. is about to write "9" in his copy book and accompanies his preparations with this flow of talk:

"(Turning the pages) 1, 2, . . . 3, 4, 5, 6, 7, . . . 8 . . . 8, 8, 8, and 8 . . . 9. Number 9, number 9, number 9. I want number 9.

(Looking at x, *but not really addressing him*). Now I'm going to do 9, 9. I'm doing 9, I'm doing 9. (He draws). (Teacher passes). Look, teacher, 9, 9, 9, . . . number 9. Pink chalk, it will have to be 9, etc."

This is practice talk, and will go on when a child is alone. More real conversation has a place in school, but the younger the child the less of it there is. This should never be discouraged among small children. It teaches them much language and helps them in their adjustments with other children and grown-ups.

Besides this informal conversation there is a real need for talk which is encouraged, and directed. It will be seen that in the time table given, a short period every day is allotted for this, and a longer one for the smaller children. There are also many other opportunities of speech training, in particular in the lessons given to stories, acting and recitation.

The school must follow the child's natural method of learning to talk, but because there will be children in the class of very different rates of development,

<sup>1</sup> *Language and Thought of the Child*. Kegan Paul, 1926.

the work must be varied and must make allowances for different stages of development. Some children will still be learning words when others are mastering sentence construction and others are learning to tell a connected story. Therefore a skilful teacher will afford teaching practice in all these types of speech on every opportunity.

The means at the disposal of the school are just the same as those of the child's own home except that the environment is more limited, and the teacher's attention more dissipated, but imitation and direct instruction still play the same parts. The simplest form of instruction is the ordinary conversation of the class room. The teacher talks, and the children respond—by action or words, and all the time they are learning. It is therefore of the first importance that a teacher of Infants should speak well, with accuracy and with a pleasant manner and intonation. The harsh scolding voice has no place in the Infants' School. This ordinary talk should be supplemented, wherever possible by the direct teaching of words. Any flowers that come to school should be named, and any interesting object spoken about, birds, butterflies, or toys should all help to increase the child's vocabulary.

The story lesson serves a similar purpose, among many others. The child listens, tries to understand, and so learns. A teacher may well explain a difficult word, or better still show a picture which illustrates it, and with older children teach the word at the end, deliberately, by writing it on the board or by some other means. The success of a story lesson, from the

linguistic point of view, is to be gauged by the new words which the children spontaneously use after it.

It used to be the fashion to teach words to babies of five, something after this fashion :

Q. : Do you see this—what is it ?

A. : A piece of *glass*.

Q. : You can see through it, so what can we say about it ?

A. : It is *transparent*.

Q. : If we dropped it it would break, so what else can we say about it.

A. : It is *fragile*,<sup>1</sup> etc.

The words in italics were put up on the board, learnt as spellings, and presumably committed to memory.

This method was futile for various reasons. In the first place all the wrong words were taught. A small child has no need of words such as *transparent*. He needs very few adjectives, and those few refer to his immediate wants and wishes. He has far more use for nouns, or verbs. No one under the age of fourteen or so could be expected to use words of this type. But far more important is the fact that the child is never made really aware of the meaning of the word. We learn words mainly through concrete experience. The best means of learning is by actual contact with the object whose name is learnt. An example from the adult's experience abroad makes this clear. Order a dish from an Italian menu, and if, when it comes, you find that it consists of small fried

<sup>1</sup> *Object Lessons for Infants*, by Mayo. I have lost the book and cannot recover it. I quote part of the first lesson from memory.



octopuses, the culinary name for the creature is fixed in your memory for ever after. It might take many repetitions before that word was learnt abstractly from a dictionary. So too with a child, a word out of its context, connected with no concrete object is meaningless, and is therefore either not attended to or forgotten.

Wherever possible this experience should be of the actual thing, but many words cannot possibly be so connected with the concrete meaning. The next best thing is a picture, but that again, for many words is impossible; abstract nouns for example have no definite concrete object to which they refer.

A child can only build up his knowledge of such words from a series of *events*. In an earlier chapter a story was told of a child building up from experience of definite situations the meaning of the word *tidy*. A large part of a child's vocabulary is thus the result, not of contact with a definite object, but of living through situations which have a common characteristic. This characteristic is picked out by the help of language and the child thus learns by experiencing the general sense of the word.

The teacher must try to provide the kind of experience to give meaning to the words that she teaches. There are many opportunities in school. One child pushes another—that is not *kind*. The school cat walks in—"stroke pussy, she would like it. Be *kind* to her". And so on. There are birds to feed, plants to water, things to put away, smaller children to be helped, and so on. The story lesson also gives an opportunity for such teaching. In a story a situation

is represented. Though it is not as vivid as if it occurred in real life, it will do much to explain and make real a word or phrase.

As we have seen a child acquires his vocabulary rather slowly and by repetition ; a teacher therefore should provide him with what he needs, and, fortunately, the child himself understands his own wants. He likes to have stories told him with refrains, and repeated sentences. He likes the same story over and over again, told as nearly as possible in the same words, and a poem that has caught his fancy will be asked for hundreds of times, if a complaisant parent or teacher can be found to endure the repetition. The school should not therefore shrink from repeating words, phrases, stories or poems ; for the latter, if the repetition is reasonably spaced, the familiarity which the child acquires serves to strengthen affection.

In the upper classes of the Infants' School it is possible for the brighter children to tell a story themselves. Certainly not all can do it, but those that can should be encouraged to try. The simplest form of narrative is in dramatic form, where the child is required to say only a few sentences and these are suggested directly by the imagined situation. " Drama " in the Infants' School is apt to be a huggemugger affair at best, but when it is undertaken the teacher should be very careful to get all she can out of the exercise. In the first place it affords opportunities for repetition. The teacher tells the story, the children repeat phrases in their acting and if several children take the same part in succession, the repetition is multiplied. At the end the main

phrases, those that the teacher has selected to teach, should be known.

Then further, with older children, it offers an important incentive to clear speech. There is an obvious reason why a child should speak out and articulate well if the rest of the class wants to hear what he says. The teacher is failing in her duty if she allows her actors to murmur, mutter, or gabble.

This brings in the last important point, the training in pronunciation. The time allotted each morning to speech training is well suited to training in elementary phonetics. Such books as Miss Fogerty's *Speech Craft*<sup>1</sup> will show a teacher the sounds of English and provide her with exercises which she can ponder. Many of them will, of course, be unsuitable for use with little children, but there is other material. Little children can perfectly well practise a sound, such as "oo," and say words in which it occurs. Then they can say nursery rhymes and little verses that they know. A child taught at home passes very clearly through the stages of articulation with such rhymes. At first he will gabble what he knows almost unintelligibly, then he improves and speaks more clearly, and at last will say all his words distinctly. This is the aim in early recitations; a gabbled inaudible verse is useless.

One of the most outstanding differences between children from good and bad homes is the quality of the voice. No sound is more beautiful than the clear, high-pitched little voice of the well-brought-up child, but extremely few children in the elementary school

<sup>1</sup> Dent. Cf. also Marjorie Gullan, *Speech Training in School*. Rodney Bennett, *Playway in Speech Training*. Evans.

have it. The voices are hoarse, harsh, over loud, or as if the child had pebbles in his mouth. In part this is often due to adenoids, nasal catarrh, or some other obstruction, in part also it is due to actual failure to produce the voice properly. The easiest mode of attacking this is through singing, and one part of any voice-training lesson should be music. The lesson should start with nose-blowing, and pass to singing on a note or scale. Then a sound should be practised, and then a verse recited in chorus or individually. To take a particular example, nearly all small children, no matter what their parentage, find great difficulty in saying the initial "h". The very small child in a good home practices it assiduously. At first when his milk is given him he savours it and says, "'ot". In a few months time, instructed by his family, he takes a deep breath and says "h—ot," leaving a clear gap between the aspirate and the rest of the word. Later still he manages to say the word in the adult fashion. Such a sound might well be practised in school, along with any others that are habitually mispronounced in the district.

There is a widespread feeling that it is hard on small children thus to make them practise, but this is due to misconception. In the first place, if the matter is done kindly the child *likes* it. There is definite intellectual amusement to be got out of experimenting with the sounds of words, and if success is praised there is real pleasure. Further this practice period should take the place of the senseless nagging that goes on too often in schools. The poor child can hardly open his mouth in the ordinary business

of the day without being pulled up and reminded of a dropped aspirate or an incorrect verb. The school has a hard task because it is in many cases teaching the child what is almost a second language, which has to compete against home influences. But nagging was never effective in teaching anything. It produces despair or rebellion, silence or a determination to talk as badly as he can out of school. The period of training in clear speech, pleasantly taken, supplemented by imitation of the teacher and lessons in recitation will achieve all that can be achieved.

There is lastly a lesson, dear to the heart of teachers, which is perhaps the most mis-managed in the whole curriculum—oral composition. It is clear that "composition" in the Infants' School must be oral because they can hardly write. But teachers have confused themselves by the name, and the result is nearly always dreary and useless. The ordinary form of the lesson is to put up a picture, perhaps of a small boat lying on the shore of a Devon cove. There is no action in the picture, and although it is not ugly, no interest attaches to it for children. The teacher begins:

"Now what can you see in this *pretty* picture?"

(Silence).

"Oh, what *can* you see? Look, what is this?"

A hoarse gasp: "*Boat.*"

The teacher drags a certain number of isolated nouns from her class, and then demands sentences and gets a series of:

"I see a boat."

This is followed by a demand for yet "nicer" sentences, and the class at last arrives at "I see a boat

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and a hill." Then fortunately the lesson period is over. Such lessons have no good results, and many bad ones. They occur because the teacher has no clear idea in her mind of what she is trying to do.

The aim of each lesson should be multiple. It should be (a) to teach new words and (b) to get the children to talk as much as possible in connected form. Therefore the material and manner should be adapted to the aim.

If a picture is used it should be one that contains action, and either animals or people engaged in doing something that the children might be expected to be interested in. Very suitable material is afforded by pictures illustrating nursery rhymes or poems that the children know. If these are used the lesson can begin directly with questions :

" Who can you see in the picture ? "

" Mother Hubbard."

" What is she going to do ? "

The second question is essentially different in type to those given earlier. It cannot properly be answered in one word. It requires a sentence to answer it. Questions in oral composition lesson should always, where possible, be of this type.

Better even than pictures, but rather harder to get, are models such as doll's houses, Noah's arks, farmyards with animals and fences, or caravans. Every school should possess a supply of such things, for their uses are many. One lesson based on a farmyard will recount the arrival of a child at a farm and what she found in the barn, the fields, the house and so on. This is partly narrative, partly questioning.

In both these types of lesson the teacher should have clearly decided beforehand a list of words that she wants to teach. These words should be brought in à propos of some object or situation, written on the board for older children and repeated in the form of question and answer by the children.

The second part of the lesson should be an attempt to get some children to give a connected narrative of the story evoked during the lesson. A teacher rapidly discovers which children are able to do this, and which not, and as far as possible the abler children should be encouraged to practice their gifts. They must not engross all the time, but the practice of refusing to let them talk, saying: "Oh, I know you can do it, I'll hear Tommy" (who is quite unable to say a word) is not only discouraging to the clever child, embarrassing for the stupid one, but boring for the rest of the class.

### EXERCISES

- 1.—Study the vocabulary of some child in school.
- 2.—Plan a set of lessons for increasing the vocabulary of a class of children. State their age.
- 3.—Plan a set of lessons in speech training. Say what defects you intend to work at: what exercises, etc., you would use.

### BOOKS

Piaget	<i>Speech and Language of the child.</i>
	Kegan Paul.
Elsie Fogerty	<i>Speech Craft.</i>
	Dent.
Marjorie Gullan	<i>Speech Training in School.</i>
Rodney Bennett	<i>Play way in Speech Training.</i>
	Evans.

## CHAPTER VIII.

### WORDS AS THINGS



THE earliest use of words is simply as a means of communication. It was so apparently with the race, it is certainly so with children ; but man has done with words as he has done with many other of his useful devices ; made them also a source of pleasure. Literature is not valuable to us mainly for what it says, but for the manner in which it says it. Words have become things of beauty even if they convey little precise meaning.

Who walked between the violet and the violet,  
Who walked between  
The various ranks of varied green  
Going in white and blue, in Mary's colour,  
Talking of trivial things  
In ignorance and in knowledge of eternal dolour  
Who moved among the others as they walked,  
Who then made strong the fountains and made fresh  
the springs  
Made cool the dry rock and made firm the sand  
In blue of larkspur, blue of Mary's colour,  
Sovegna vos.<sup>1</sup>

<sup>1</sup> T. S. Eliot. *Ash Wednesday*, IV.



Poetry can also say the most obvious things in words that are as simple and beautiful as crystal beads.

The night has a thousand eyes  
And the day but one,  
Yet the light of the whole world dies  
With the dying sun.

Even in novels, where the author apparently has so much more to say, it is the manner of the telling that distinguishes a good from a bad book, far more than plot or even incident. In adults we call this appreciation of words a literary sense; but it is nothing remote or remarkable, and children are capable of much exploration of a literary kind at a very early age.

Words, as soon as they have been learnt, are capable of becoming objects of interest just as much as anything else in the environment. It is true that they are not so appreciated by all children, but often it is the teaching either of home or school that makes this impossible. Before a child can appreciate words he must know how to use them fluently, or at least fairly fluently. He must have a sizable vocabulary and be interested in the process of enlarging it, and he must be accustomed to hearing words used readily and with respect. These conditions are only satisfied by a child who comes from a fairly intellectual home. The majority of children in elementary schools seem to find words so difficult to say, so intractable on their tongues that naturally they cannot use them easily. Moreover, there are such difficulties of pronunciation, their methods of speech are so

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different from their teacher's that a ready supply of language is not available. The child from an uneducated home is years later in developing literary appreciation than the child who comes from a cultivated family. But in spite of this difficulty the school can do much to promote the more advanced use of words.

There is no doubt that the early stages of literature must be oral. This implies no inferiority when compared with "written work". For centuries, during which some of the finest poems in the world were produced, literature, like fame, fluttered on the lips of men. It was no offspring of the pen, no child of ink. It is often assumed in schools that at a certain age "oral composition" ceases and children write "properly". This is, of course, nonsense, and quite apart from other things involves a gross misrepresentation of later life. The average person, even the average educated person, writes very little, a letter here, a bill there, but for the most part he talks, and on his talk we judge him. The effect, however, of school methods is very marked, even in the Infants' School. In one class of 50 children only two could give a verbal account of a story which had just been told. About a third could write it ; and this was a class that had only just acquired the art of writing ; and nearly half the whole class were unable to do more than copy a few words very badly.

Even the literary person usually shapes his sentences verbally before he writes them. This is Gibbon's account of his methods of writing the *Decline and Fall*:

"It has always been my practice to cast a long paragraph in a single mould, to try it by my ear, to

deposit it in my memory, but to suspend the action of the pen till I had given the last polish to my work."

Probably few writers are quite so deliberate as Gibbon, but all depend largely on internal speech, both when preparing their material, and when actually writing. Unless this internal speech is easy and fluent the pen halts and stumbles; were it as incoherent and difficult as is the speech of the school child, nothing would ever be accomplished.

There is a well-known fact that has never had the effect on school teaching that it deserves. Children, again like the race, start literature with verse. A child on his mother's lap appreciates, and even repeats a nursery rhyme a full eighteen months before he can attend to a story. Very simple rhymes and poems are the proper literature of childhood. At five or six a child can enjoy a large number of poems, and A. A. Milne, R. L. Stevenson and many others are extending his horizon in all directions. At a slightly later age poetry is just as important to the child and there is no reason why there should be any break in the sequence of poems. The adult also relies on verse to a strange degree. In unoccupied moments scraps of verse flit in and out of his head; a phrase here or there gets him up in the morning and starts him off to catch the 'bus to work. A cool line intervenes and consoles him while waiting for his lunch in a hot café, and at night at his ablutions a little Tennnyson adds fragrance to the bath salts. The only other mental content of the same pervasive character is music; and tunes will haunt and console in the same way that lines of verse do.

Children like their verse to be familiar, and they do not care for explanations or discussions. Little children sing or say nursery rhymes day after day with great contentment. Familiarity is valuable both as teaching the rhyme more and more fully, and also as having a value of its own. All through life we like the things we know, whether it be tunes, styles of architecture or coal fires; and little children are, if anything, more conservative than their parents.

In the second place a child's earliest compositions may well be in verse, not necessarily in rhymed verse. A child will discover and enjoy rhyme quite young. One boy of three years two months was fascinated by the newly discovered quality in words and used to lie awake in bed murmuring happily such pairs of sounds as "stairs, prayers", "prayers, stairs". As he could not read he was not disturbed by any dissimilar visual image. A child can be encouraged to pursue this line of thought, and he will laugh with pleasure as new words and rhymes present themselves. Even from a school point of view this learning of rhymes is useful. Many *are* spelt in the same way, and form series that a child might well learn—e.g. fight, might, sight, etc.

But to insist on rhyme, especially regular rhyme in early verse is a mistake. Pattern in verse is hard to attain. Rhymes can come and go, and add a charm when they will. Poetry does not depend on rhyme.

An element to catch a child's notice even before rhyme is rhythm. A tiny baby will imitate the inflection of a voice long before he can talk, and a child will catch the rhythm of a verse and imitate it directly

long before there can be any question of analysis into feet or a formal measure. It is not even right that a small child should be asked to imitate a set scheme of rhythm; rather he should be encouraged to express himself rhythmically and in the general manner of verse.

Even under the present methods of teaching, child poets are common enough to show that verse is no prerogative of the adult, and the work of little children has a freshness and naturalness that is completely charming. On the other hand, it must be remembered that verse is an art, and just as no teacher would expect the whole class to produce pictures fit for the Royal Academy, or short stories suitable for *Harper's*, so not everyone will write verse. What is so remarkable is the excellence of the verse when compared with the child's efforts in other forms of art. A child's verse may be real poetry that gives genuine pleasure. No other art product of which he is capable at that age is anything but very bad when judged by an adult standard.

The basis of prose is very close to verse. The making of "pretty sentences" is a game that children of five or so can enjoy.

Miss Drummond in *Five Years Old or Thereabouts* tells how she taught her little niece to make up "pretty sentences", and the following are examples of the type of sentence the child evolved:

"The larches grow so tall and straight.

They hold themselves so straight and tall."

This sentence is almost verse—or quite verse. It has rhythm, repetition, personification; in fact,

all the qualities except rhyme, and that is by no means essential.

The story for infants has at first a very simple structure, combined with repetition, and incidents, which if not the same on each occasion, have at least a comprehensible similarity. The tales of *The Three Bears*, or the *Three Little Pigs* are universal favourites from one generation to another. In their own style they are perfection and combine all the elements that such a story should possess. The less repetitive stories come next, but not till a child is seven or eight is it capable of appreciating stories of at all the adult type. For example a top class in an Infants' School was told a version of the *Tale of Troy*. The first story was concerned with the Apple of Discord and the Judgment of Paris. That was appreciated. The next story was the quarrel between Achilles and Agamemnon, which was not understood in the least, though told in the same manner and by the same teacher, and the subsequent stories of fighting were also disliked. So definite was the effect of the first story as compared with the later ones, that when the class was asked to retell a story three weeks later they all went back to the apple. Such a story as that of Noah was liked and remembered by the class.

Stories on the fairy tale level, and with fairy tale motives, are a necessity with children between six and eight because they are not able to understand others, and they are growing too old for the simple adventures of rabbits and bears. Nor is the fairy story to be despised. As an art form it has a well developed technique of its own, and for many adults

it still possesses a peculiar charm ; the charm that it has for the young. The fairy tale is free from the bonds of practical necessity, yet it has its own logic. It is like the mind of the child who makes himself into a lion, and the chair-back into the bars of his cage, and then has to have his supper brought round to him because, of course, he can't get out himself to take it. The fairy tale has its own system of morals, which are also the morals of the nursery ; be good and something good will happen to you, be the youngest and you will grow up into a great king. And even more important, the emotions are nursery emotions : fear of a great ogre, that you can after all kill quite easily, adventures up a bean stalk that grows in your mother's garden, a kiss to the Sleeping Beauty, and a courtship as simple as saying to the little girl in the next garden : " Shall we be married when we grow up ? "

The adult, tired of actuality, tired of emotions frayed to rags by the vigorous novelist, often turns to such books as the *Arabian Nights* or Mandeville's *Voyage and Travail*, and finds the old childish joy again.

The exercise connected with the story is the retelling of it, but that should not be demanded too frequently, nor in such a way as to destroy appreciation. The story must not be robbed of its place as literature to become merely an excuse for verbal practice.

### EXERCISES

- 1.—Make out a list of stories suitable for a class. State the age of the children.
- 2.—Make out a list of poems suitable for a class. State the age of the children.

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- 3.—Show how you would encourage children to begin composition for themselves.
- 4.—Discuss the possibilities and technique of the class room play in the Infants' School.

### BOOKS.

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|------------------|--|
| Marjorie Gullan  | <i>Spoken Poetry in the Schools.</i><br>Methuen, 1926.                         |
| Bryant           | <i>How to tell Stories to Children.</i><br>Harrap, 1910.                       |
| Elizabeth Clark  | <i>Stories to Tell and How to Tell Them.</i> University of London Press, 1927. |
| Wontrina A. Bone | <i>Children's Stories and How to Tell Them.</i> Christophers.                  |
- This book has a large bibliography.



## CHAPTER IX.

### AESTHETIC EDUCATION.

#### (I) APPRECIATION



The simpler forms of aesthetic appreciation seem innate in the majority of children, and the loss of them, which is so marked a feature in many adults, is rather due to failure to retain them than to natural deficiency. The same is true of the tendency to talk, or the movements of curiosity. A child is discouraged by apathy or positive hostility on the part of those around him. The following dialogue was overheard in a 'bus. The child was probably four years old, he was not at school, and he could not talk clearly ; his mother was of the lower working class type. The child kneeled up on the seat of the 'bus and looked out, full of excitement at the passing vehicles.

Child : " Oh, look, what's that ? "

Mother : " Eah ? "

Child : " What's that ? "

Mother : " Eah. "

Child : " Look, that's a car. "

Mother : " Eah ? "

Child : " That's pretty. "

Mother : " Eah. "

And so on. The mother's response varied between an " eah " that was a question and one that was a command. No child could learn either language or appreciation from such a parent, yet she was not hostile. The child's talk died from lack of sympathy and not from a command to " Hold your noise. " So too, appreciation perishes. If a home is utterly drab, if no one has any time to discuss or point out pretty things, if no music is played, if nothing is drawn or made, a child loses its primitive delight in these things. Yet delight dies hard. In one Infants' School in a poor district hats began to disappear during the summer, and it was noticeable that the prettiest and those trimmed with flowers went first. The culprits were two girls, members of a family of nine on the lowest level of poverty. When taxed with the theft, the baldest explained " But they were pretty. " Napoleon, who " acquired " so many objects of art during his Italian campaign, could have said no more nor less.

The earliest form of pleasure through the eye is derived from bright colours, especially coloured lights. Examples of this have been noticed already, and the supreme object of childish joy, the Christmas Tree, is a mass of lights and shining colour. Presents are v

nice, but it is the first sight of the gleaming shape with its faceted trinkets, and glittering tinsel that draws a gasp of delight from children, and stirs a primitive joy in the more sophisticated adult.

In school this pleasure can be provided to some extent by pictures, paint, table cloths and flowers. To pass from a home where everything is the colour of ten years' old dirt into a classroom that is gay with colour must be a great pleasure to the poor child.

Unfortunately England is an unhappy land as far as colour is concerned. There are two things necessary for colour as a child understands it, sun and clear air ; and in our towns we never have them both, and only rarely do we have the former. Even when we do have sun it has to penetrate such dirty windows that it loses its power, and the children miss the aesthetic pleasure it could give.

We realise more fully the nature of our deprivations when we see schools in more fortunate climes. In the south of France a kinder climate, and the use of more sensible fuel keep the air clear. A school will be built round a courtyard, and the walls inside and out washed white and embellished with brightly coloured tiles made into patterns. In the small inner court flowers grow profusely, the roof of the school is of curved tiles, glazed and coloured. The place will keep clean, and, when it is soiled, a wash to the tiles and a coat of whitewash will restore it to its pristine vividness. The mere sight of the place, with its sun and lightness is stimulating. Again, in a land like Ceylon, most of the schools are built without walls. Pillars support the roof, and a wall, some two feet high separates the

rooms from the wide verandahs running down both sides. The air flows through, and, looking out from the shade, one sees sun-drenched green, or cocoanut palms against a blue sea.

In England our first attempts at beauty are deadened by the black wall, the unclean window, and the factory chimney. But with all these disadvantages the school can supply a certain minimum of cheerful colour, and should try its best to do so.

An aesthetic training is not fulfilling its function unless it brings children to care for beauty in its most healthful forms. It is better from this point of view to look at crocuses in Hampton Court than early Italian paintings in the National Gallery, and the beauty in the classroom should be a reflection of the beauty without.

It has already been said that a garden is an essential part of an Infants' School, and it is in trees and flowers in the open air, that children should be encouraged to find their chief pleasure. Too often, of course, there is no garden and no hope of one. The school crouches beneath a mine-tip or the walls of a vinegar brewery; yet even here it might be possible to grow nasturtiums in pots. Other schools, more fortunate, have borders which could be cultivated. These too often lie bare and empty, or are left to the school caretaker to plant with carrots. Yet gardening is one of the occupations to which English men and children take with the greatest readiness. In after life few people are so devoid of everything as not to have space for a window box, and competitions for the best box are well known features of life in some of London's poorest districts.

The arrangement of flowers in vases and their care is one of the most valuable exercises for children in school. They learn both to appreciate the beauty of the flowers, and how to increase that beauty by their arrangement. In Japan the arrangement of flowers is taught as one of the arts—would it were in England. Even in a high-grade florist's shop the decoration is rather intended to catch the eye than to satisfy it; and many a school thinks that it has done its duty when it has pushed a mass of blooms into the nearest convenient jam jar. Every school should possess a number of vases really suitable for flowers. They should be of various sizes and shapes, and of different colours. There should be some tall ones for delphiniums or a branch of leaves, straight ones that would hold daffodils, a bowl with a glass holder for coloured anemones, a slender glass one for a single rose, and a deep dish in which to place primroses and moss. Children should be taught to select the proper vase and to arrange the flowers in the manner that best suits them.

Farther, there is no little art in the combination of different blooms. Bluebells alone tend to look draggled, but arrange them with twigs of opening beech leaves and they are delightful. Buttercups and cow parsley, though they do not last long, are a charming decoration for the day, and pansy flowers and pinks have a wonderful sweetness.

With smaller children the chief training that the arrangement of flowers gives is in manual dexterity. A child of five is delighted to lift the flower carefully, and to put it in its place. In doing it he learns muscular control of a delicate kind, and he also enjoys the touch

of the stalk. Few flowers have stalks or leaves of the same texture, and the down, for example, on the strong stalk of the cowslip, or the juicy smoothness of the bluebell, can give sensations of great pleasantness.

This care of flowers when they are picked is one of the best ways to prevent the wholesale destruction of flowers by the town child let loose for a day in the country. The senseless grabbing of armfuls of flowers, only to drop them on the way home, is the result of unfamiliarity, and a starved longing. The child who is used to flowers is free from the temptation, and if he is made to arrange carefully all he brings home, the magnitude of the task, when he has been unduly greedy, will impress on him how few he really needs for adequate decoration.

Another important line of development for the aesthetic sense is connected with physical training and with music—the training of a sense of rhythm.

The official and expert view on the physical training of young children is set out in the Board of Education's "Syllabus of Physical Training"<sup>\*</sup>. This syllabus suggests two short lessons a day, the primary lesson in the morning being chiefly simple exercises, games, jumping and running and the secondary lesson, in the afternoon, including the use of free apparatus such as balls, rope, battledores, etc.,—dancing, action songs, singing games and rhythmic movement.

The procedure for the primary lesson is given in fair detail. The secondary lesson, including music, is dismissed without much comment.

<sup>\*</sup> The relevant chapter (vii) is sold separately, together with 30 specimen lessons for children of 4, 5 and 6 years.

The importance of training children's natural sense of rhythm can scarcely be exaggerated. It is the basis not only of much appreciative pleasure in later life, such as delight in music and poetry, but it gives grace and dexterity in movements of many kinds, not only of dancing.

Little children develop very early a power to respond to rhythm. Old-fashioned nurses rock the baby asleep; almost before he can stand alone a child will move limbs or body to a simple rhythm, his earliest pleasure in verses, such as nursery rhymes, or songs, such as "See-saw, Margery Daw" is almost entirely in the rhythm. Children in some more primitive societies, such as the Red Indian, develop powers of appreciating complicated and extended rhythms which are far beyond the comprehension of the ordinary "civilised" ear.

In Infants' Schools the most successful methods of educating a sense of rhythm all have this thing in common—that the training is given in connection with music and that the children *move* in time to the beats. Sometimes they clap, or move their heads. In more progressive schools they walk, march, skip or hop to musical rhythm of various kinds—now slow, now fast, now loud, now soft. They can mark the loudness or softness by their pose. They realise that there are many tunes to march to, many various melodies by which they rock a doll to sleep, and they soon begin to express spontaneously in their movement the 'feeling quality' of the rhythm, its gaiety or solemnity, its joy or its sadness. Incidentally, if they talk at all about the music, their vocabulary is extended in a very useful direction.

In many schools there are percussion bands, in which the children play such instruments as cymbals, drums, triangles, castenets, bells and tambourines. The teacher plays the tune on the piano, the children accompany her, the different instruments playing separately or in concert as the piece demands. The playing consists, of course, in marking the rhythm of the piece. The conducting, that is, keeping the time and calling in or silencing the different groups of instruments, is done by one of the children. The activity is greatly enjoyed by the performers, and if done well is not unpleasant to listen to. Its training value is very high.

Again the children often learn set dances, such as jigs, or even simple folk-dances. This is good in itself, but cannot take the place of the more varied training that other methods afford.

The ineffectiveness of much rhythmic training in schools is due to ill-informed or vague planning. The work is frequently unprogressive, and you find the children in the top class doing with but little more precision, what was done in the lower class. Tired with unprogressive repetition, the children have lost interest.

The rhythms must be graded so that the children feel themselves getting on, and an interesting variety must be provided. There is no need to stick to the crude rhythms of school marches; such pieces as some of Brahms' Waltzes, Schumann's simple melodies, old sarabands and minuets, even Tsaikowsky's *Casse Noisette* suites are all possible—if there is a pianist equal to them. One class of seven-year-olds "played "



*The Blue Danube* waltz with much pleasure, and another class stepped with creditable accuracy to the last movement of the *Kreutzer Sonata*.

If the school staff does not include an adequate pianist, then the gramophone can be used. Established firms, such as His Master's Voice, publish catalogues of educational records, which include exercises for rhythmic training. But the teacher should not limit her choice of records to those in the "educational" section. As in the case of pictures, a catalogue to which that uninviting term is attached is not likely to include the more enjoyable of man's creations.

When we pass from appreciation to practice, small children are at a great disadvantage. They are so unskilful, and in most of the arts so much depends on technique. Moreover, they have not yet learned to understand accuracy, and a teacher who wants work of any degree of finish must give such explicit instructions that all spontaneity is lost. The steps therefore to the practice of art are through forms which are very simple and make least demands on the children for real artistic effort. Roughly, they can be divided into "handwork" and "drawing", the latter being used in the widest sense.

Handwork is a vague term used to cover anything which is neither book-learning nor sewing. In the Infants' Schools it may include modelling, making paper dolls, ships, houses, winding raffia or cutting up bits of green stuff to simulate grass on a co-operative model. It came into the schools with difficulty and has since held an ambiguous position, ardently championed but always on the verge of futility.

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In 1837 the Rev. Dr. Mayo, a well known education-  
alist, wrote :

“ There is one point in moral education, to which too little attention has been paid in Infants' Schools, the cultivation of *habits of industry*. There will doubtless be considerable trouble in teaching such little children to work, but as the good which would result is altogether incontrovertible, the labour would be well bestowed. . . . In France the children in the Infants' Schools prepare the lint for Hospitals ; and could not the same be done in our schools ? It might not be a bad plan to allow them to thread beads, it would promote dexterity in their fingers, and they might be practised in discriminating and arranging colour. Such exercises should be occasional, perhaps once a month. One objection may occur, the waking of a love of finery ; but there is not so much fear of this in young children, and as they will have to encounter such temptations at home it may not be amiss to have an opportunity of exposing the evil of vanity, giving them the right corrective, and recommending the gospel ornament of a ‘ meek and humble spirit.’ ”<sup>1</sup>

It is a far cry from these cautious proposals to the modern enthusiast who would save, not lose souls, by threading beads.

It is essential to have a clear idea of the purposes to be served by handwork. In the first place children like it; the clever because they can plan and devise, the stupid because it is a rest from lessons in which they must make more effort to think. Thus from the beginning there are two divisions in the handwork

<sup>1</sup> *Practical Remarks on Infant Education*, p. 61.

class, and a teacher must endeavour to deal with both. The brighter children should be encouraged to use all their natural ability and inventive powers; the dull ones should receive enough guidance to keep them from sitting idle and puzzled. Too often a teacher pleases one group but not the other. To complete a co-operative model, green raffia was chopped up to make grass. The *whole* class did this for two lessons of thirty minutes each. Now cutting up raffia is a perfectly good occupation for a mentally defective child of six, it is not suitable for a class of children of average intelligence. On the other hand a teacher frequently gives a class a task, such as cutting out crocuses from coloured paper, and explains so inadequately what she requires that half the class never do anything. In handwork, as in all else, a teacher should know the capabilities of her children, and act accordingly. A task could be set, the brighter children started and allowed to work according to their own ideas, and the duller collected and given more precise instructions.

Secondly handwork should train manual dexterity. We often forget how dependent we are upon skill. Some people are terribly clumsy, cannot do fine sewing, are bad hands at pastry, and break cups when they wash up. In part this is native defect, in part it is lack of training.

People differ very much in such a thing as the discriminative power of the finger-tips. If a set of cards are punched, some with one, some two, some three, some four holes, and a person is set to sort them by touch alone, there are wide differences in the ease

and accuracy with which the task is done. If a person has naturally delicate discrimination it is much easier, for example, to learn to knit without looking at the work ; for a great part of the guidance comes from the feel of the wool and knitting-pins against the fingers. There is a general accuracy and control of movement which enables you to set down a cup exactly where you intended to place it, and with just the right amount of momentum. But all these powers can be improved by practice, and not least because they are to a large extent mental. A very obvious example in accuracy is woodwork. If one is cutting wood to make a picture frame the angles for the corners must be exactly  $45^{\circ}$ . In cutting these corners there is an element of manual dexterity, but also a mental element which consists in "taking trouble"—in feeling that it matters very much, and in working with all due precautions to secure accuracy.

Handwork should teach the rudiments of this skill. In the East, where manual work is not considered suitable, children of the upper classes do nothing of the sort, and adults are quite amazingly helpless ; yet when they are taught a trade, as lace-making, there is no lack of skill. Even in Victorian days in our own country, boys were allowed to grow up without manual dexterity, and the helpless male, who cannot thread a needle or sew on a button, is a remnant of that stage of culture. It follows from this that the handwork taught in schools should be as varied and should require as many different kinds of dexterity as possible. At the same time it must not be forgotten that great accuracy is a virtue foreign to the young. Some

Infants' Schools display with pride sets of calendars that a class has made—forty bits of cardboard, all exactly rectangular are covered with pieces of wall paper, all exactly folded, backed by coverings of white to hide the edges, adorned with bits of ribbon all stuck on in exactly the right place, and so on. The sight is horrible, because one of two things has happened. Either the teacher really did it all, or else by rigid directions she produced this most unnatural and unhealthy display of precocious accuracy and exacting oversight. Accuracy is a means to an end, and small children are most unlikely to appreciate the particular end which accuracy serves.

Thirdly, handwork should be one of the steps on the road to aesthetic appreciation. The work of children should be pretty, or at least express an attempt to reproduce something they have experienced. Plasticine modelling is not generally productive of beauty, but through it the child expresses his observation of men, horses, cats or trains. On the other hand, when he is cutting paper, or working in raffia his aim should be to produce objects that are pretty in colour and shape.

In the Infants' School, if a use can be found for the things made, so much the better. It was a deplorable custom, still existing in some schools, of teaching children to knit by giving them dirty knitting cotton and steel pins and causing them to knit a strip one week which they unravelled on Friday, so as to be ready to repeat the process next week. Small children are always eager "to take it home and show mother"; and this has sanctified countless "wall

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tidies " or " napkin rings ", carried to families which probably never use either.

Amongst the forms of handwork that are within the capacity of children of five and over is modelling in wax, or clay, or some composition such as plasticine. The youngest children can do little more than roll balls or "sausages" of various kinds and the lower limit of the work is fixed by strength as much as anything else; a child of about three years old has hands too weak to shape the clay, and teachers must remember that this material may be very difficult for small hands to work if it is at all stiff.

Paper tearing, or even cutting if the scissors have rounded ends, is very useful for small children. It is an activity which teaches much manual dexterity, and it is also a method of artistic expression which is within their power and capable of development. Roughly it has two forms. There is cutting along a given outline, and there is free cutting when the children use their own invention. The first type undoubtedly has its attractions. Most people remember their hours of joy when engaged in cutting out the pictures of men or women, pots or mangles contained in a stores catalogue. In schools this form of cutting can be used in connection with paint or crayon, and the children can colour and cut out figures and flowers to be used on friezes or stuck into scrap books. The other form of cutting is perhaps more educational, because the children must themselves supply more thought. A very simple form of this exercise is to "dress" a match stick man which the children draw on their paper. Over the bare lines they stick coat,

trousers, boots, hat, etc., and they try to make their figure look happy or in a hurry. Another very simple exercise is to cut out the family washing and hang it on the line, adding the basket by the side, and, if imagination runs to it, mother hanging up the clothes. Such exercises lead on to harder forms of composition, and paper cutting can become a genuine and highly elaborate form of art, as was shown by the works of the Viennese children. It will not of course reach this stage in the Infants' School, but if carefully taught, and if plenty of scope is given for originality it will probably be on a far higher level than the drawing.

For most children it is easier to think in mass than in line, and paper cutting provides the mass. The reason why such comparatively poor results are obtained is that too often the child's invention is artificially restricted by making all the class cut out crocuses, or daffodils or balloons, or some other thing for use in a co-operative frieze. Such work has its merits for very young or uninventive children. It gives no scope for the best to show their powers. When this repetition work is being done the option of doing a piece of individual, self-planned work should always be offered, and if a teacher knows her class she should be able to estimate how many children are capable of working alone and make provision for them.

Another activity suitable for handwork is the making of simple toys. This serves the double purpose of providing the children with training at the moment and pleasure afterwards. At the lowest level are wool balls made by winding wool round two circles of cardboard. The activity is monotonous and requires

no great skill. All the teacher must see to is that the wool is thick enough. Thin wool involves a constancy of effort which is beyond a small child. Rug wool is perhaps to be recommended. More elaborate toys are doll's furniture, which can be made from specially prepared wood and sticks, like match sticks. The wood is in thin sheets and can be cut with scissors, the sticks can be cut with a pen knife and the whole stuck together with seccotine. Many toys can be made from odds and ends, boats from walnut shells, chairs from chestnuts and pins, houses from match boxes stuck together and painted. The essential thing in all this work is that the children should be encouraged to use their own ingenuity, and, if the materials are only odds and ends, to bring them themselves to school.

Very often work of this sort is done as part of a co-operative model. The children can make contributions for a toy-shop. In this case the game can be continued in a manner to be described later, and the children buy and sell their own wares. Another piece of co-operative work that provides scope for various activities is furnishing a caravan, if the school has a big model of one, or the more conventional dolls' house.

Besides these we have raffia and paper modelling ever with us.

Much has been said about the advantages of the co-operative model. The teacher provides a background while the children make flowers for the garden or cottages for the fishing village. It is urged that each child takes pleasure in his own part and derives added satisfaction from seeing his contribution as part of



a larger whole. This is probably true. The difficulties of this scheme are to think of a model that provides sufficiently interesting and varied occupations for the class. The most satisfactory models are things like fairs or toy-shops, the least are gardens where the children are practically confined to cutting up raffia, making paper flowers or rolling bits of plasticine to pave the garden path.

True art is scarcely within the scope of the Infant School, but even little children can do something towards it.

In artistic creation there are two distinct elements, the desire to create, and the skill to do it. In adults one or other of these is often lacking, and curiously enough it is as often the first as the second. To take, for example, one particular art—literature. Men do not *want* to write. A man may be perfectly able to write a very good book on, say, mediæval churches. He may give excellent lantern lectures on them, but he does no more, pen and paper arouse in him no desire, only an uneasiness which grows increasingly acute the longer he contemplates them. In the case of drawing few people have the power who have not also the will to use it. We are forced by our various activities to learn to write, and even to write well, but few men need learn to draw unless they want to; but even here there are cases where the skill is present, but the creative impulse is lacking. The true artist has both, and his distinguishing feature is that the desire to produce drives him ever forward through the weary task of acquiring the necessary skill.

The child is like the artist, or we might say that the

artist has retained the characteristic of the child. The desire to create is strong. There is hardly a child who, if given chalk and paper and told to draw, does not do it with eagerness. He draws badly. He knows nothing of perspective or technique, but he draws from his own head and he enjoys doing it. His desire to create is the school's opportunity, and nothing in the teaching of art should discourage it. If it only remains, the knowledge of technique will be added to it. If it disappears nothing can bring it back, and then the most faultless technique, if by any marvel it might be acquired, would rust unused—a fine tool cast in a lumber room.

Nor must it be imagined that the aim of the school is to produce professional artists; it could not, if it would. Yet many of the devices used in schools smack of the professional art-school and are inappropriate to the classroom and to small children. The aim of a school should be to produce amateurs who will derive pleasure from the practice of an art in their spare time, and also get the maximum enjoyment from contemplation of the world.

The amateur is not a slave to his technique. The better he works the more satisfactory it is, but there is much truth in the reversal of a trite saying: "If a thing is worth doing at all, it's worth doing badly," and the amateur who wants to paint and yet paints badly is in a better state than if he did not paint at all. There is not much room in the world for professional artists; everyone can be an amateur, and do nothing but good by it. Moreover, the talents necessary for the professional artist are given to few. During some

sixteen years nearly 1,000 boys have left a certain famous preparatory school. The boys all learn drawing, and nearly all like it. The work is of a very high standard. Out of all that thousand, coming from some of the most gifted families in England, only three are likely to become professional artists. Many others will become good amateurs, and a great many more will keep up their drawing in some form or other. These three children were unmistakable from the beginning; and a fourth in the series, who is still at school, showed his superiority to the average when he arrived there, aged 8.6. The power when it exists cannot be mistaken. It is also very rare, so that it is nonsense to teach the mass of children as if any one of them might be an undiscovered Michael Angelo. If the teacher did not discover the Michael Angelo in two lessons she would be unfit to teach drawing.

The school therefore has in mind the production of amateurs in the arts, and therefore its essential function is to make children enjoy their practice. The dull lesson has no place. It may be planned to teach something of the most fundamental importance in technique, but if it is dull it is destroying its purpose. This is even more true in the Infants' School than with older children, as small children are more intolerant of boredom because they are less able to understand the aim beyond the immediate discomfort.

At the same time children in Infants' Schools should not be left to scribble in happy uninstructedness. A small child's lack of skill is due to two things. He has not the fine muscular control over his tools, and, even more important, he has not learnt to observe the object

before him. To observe an object accurately is difficult, and needs real training. A little child draws from preconceived opinions with never a glance to verify his ideas. A teacher should always try to correct this. But the method is not formal lessons on "observation", but an appeal to the object or to experience. Whenever possible, therefore, if the teacher demands an imaginative picture she should have some elements of it for the children to observe, and they should be encouraged to do so.

For example if a Standard I is reading the *Water Babies* they might be asked to draw a picture of the fish. This exercise is useless unless the children have something to assist them. A goldfish in a jar will delight the class, and lead to the production of quite charming drawings. Moreover, in observing for the drawing, they learn many things about the fish that the less interesting nature-study lessons would fail to teach them.

The power to observe will grow only very gradually, even under the best teaching. It is like all the other skills. There must be continued practice, accompanied by every degree of success and failure before the power is established. Even an adult student, who knows what is wanted, and is determined to do it, fails again and again. The work of an art teacher in a big studio consists of saying over and over again, day after day, to each individual student, "Look! It goes like this, you have got it wrong." A teacher who thinks that a single lesson, or even a course of lessons on "observation" will do any good, does not know the conditions of learning. The teaching on this point

must continue steadily ; and by the time the children leave the Infants' School, very little will have been learnt, no matter how hard the teacher works.

In the same way the physical skill required will not have developed very far by the age of seven. Probably the easiest medium is that in common use, coloured chalks on brown paper. The disadvantage in it is that it does not develop easily. The gap between the child's chalk and the artist's pastel is very difficult to bridge ; and, supposing it is bridged, a pastel drawing is extremely unsatisfactory—from a child's point of view. It smudges easily and may be ruined by any of the many accidents that school works of art are subject to. Further, chalks and pastels are always being ruined, lost, broken, or rubbed one against the other, till the thought of using them is revolting to the more tidy-minded.

Water colours from this point of view are far more satisfactory ; provided there are proper boxes and the teacher does not have to squeeze out three dabs of colour into three saucers for each child. The doctrine that all colours can be composed from the primary colours is false—as the child soon discovers. Moreover, the barren poverty of the three dabs is most damping to a magnificent imagination. On the other hand, it is hard for a small child to manage a brush ; water is liable to be spilled ; and so on. Yet the advantages of teaching the dexterity necessary for water colours to the young are great. If a little child learns to paint to a line, if he learns to get his paint on to the paper, the path for later development is made very much smoother, and a cheap, convenient and

extraordinarily charming and supple medium is provided for later work.

By about five a child in a complacent home begins to paint. The game at first is colouring pictures already drawn in outline, and the number of "painting books" published testifies to the popularity of the pastime. From this occupation a child learns the fundamental technique of water colour. It is not till three or four years later that he achieves the power to make pictures in the medium.

Nor indeed is it suggested that a class of fifty children should all be given paints and water. Of all the lessons in the time table, handwork is the one which lends itself most naturally to individual methods, and yet it is one in which teachers seem unwilling to use them fully. It has already been suggested that the class should be divided into groups according to the amount of specific instruction that different children need. This division might well be carried further so that different sections of the class work in different materials. Ten children with paints are a manageable number. The teacher's only care should be that the more desirable occupations go round the class in equitable rotation.

### EXERCISES.

- 1.—Make a list of suitable subjects and objects for drawing lessons in the Infants' School.
- 2.—Plan out a term of handwork lessons and say if you would divide your class into groups and how.
- 3.—Describe some ugly classroom that you know and say what you would do to try to improve it.

- 4.—Supposing you had a strip of garden 20 feet by 2 feet along the school wall, what would you attempt to grow in it ?

## BOOKS

R. K. and M. I. R. Polkinghorne	<i>Weaving and other Pleasant Occupations.</i> Harrap, 1913.
Bone	<i>Service to the Hand in School.</i>
E. M. Bowman	<i>Book of Infants' Crafts.</i> Arnold.
Plaisted	<i>Handwork in Early Education.</i>
McBeth	<i>Playwork Book.</i>
Helga Eng	<i>Psychology of Children's Drawings.</i> Kegan Paul, 1931.

## CHAPTER X.

### PROJECTS.



In the last chapter mention was made of "communal models". These have been popular for some years; and "Projects," one of the latest methods of training adopted in Infants' Schools, is partly a development of communal model making. It is also a development from those games of endless imitation which all children play if left to themselves—games of "shops", "houses", "schools", "trains", "stations", and the like.

What is new in the "Project" method is the idea or ideal behind it, that since children learn most rapidly, thoroughly and easily by living through ordinary experiences, the school should incorporate these experiences into itself.

Exponents of the method explain that children naturally "project" purposes and plans of their own in which they are interested, and for which they are prepared to work. We can see this in their preparation for their own amusements in the games already mentioned.

The teacher's part is to encourage these plans and purposes, to get the children to develop their ideas about them, to arrange time and space in school so that the purpose can be worked out by the children, and then to lead them, both in the making and when it



is completed,—(which it seldom is)—to take full advantage of all the opportunities it offers for learning useful activities in connection with it.

The theory is that the carrying out of an idea which intrinsically appeals to the children gives to learning a purpose which they can understand; that reading, writing, number and handwork, for example, appear at once in a different light when the children feel the need of them for doing or making something that they really want to do or make.

Examples will make the matter clearer, and show, perhaps, the dangers and difficulties as well as the advantages of the method.

A class of six-year-olds, 40 in number, were told about a postman. All children love to have letters, and the theme seemed popular with them. They were later taken to see the local post-office (half the class at a time), and it was suggested that they should make one for themselves.

This was not to be a "communal model" of the old type, where the teacher provides the background, and the children make the articles to complete it, and which, when done, is an unusable piece of litter, beautiful as it may appear in the children's eyes. The "project" post office was to be planned and made by the children, and to be large enough to be usable by them.

The children and teacher talked the matter over, and decided on what was needed. The time-table was arranged so that every afternoon the period following play-time could be given to the 'project' and sometimes other short periods were used also.

The children divided themselves into groups to make the things they wanted, stamps, money, a cash-box, envelopes, post-cards (plain and picture), telegram forms, a pillar box, a counter, and so on. The teacher had to help with some of these things; and in some imagination played a large part, as it did for all of us in the days when a table turned upside down became a pirate ship, or a table-cloth a nomad's tent.

But to the children all was very definite, and very important. They bustled about the room, they brought useful oddments from home, they had most ingenious ideas as to how things could be done and made, and they were extraordinarily industrious.

The counter was made of two tables tied together, with a screen of wire netting tied crudely on to two sticks fastened to the table-legs. The pillar box was made of round hat-boxes stuck together with binding tape and painted. The telephone was made of gas-mantle boxes. Money was made of paper and cardboard.

Every child in the class had a weekly allowance of "money", and could "buy" what he needed from the post-office. Accounts were kept, change given, letters written, envelopes addressed and stocks of all these things replenished with that seriousness which only children at play can show. The pillar-box was cleared every day half an hour before school closed, and the letters sorted and delivered by the children. The headmistress and teachers received many.

The plan was never completed, for children's imaginations and schemes are endless. Development and addition of details came to an end only with the end of

term, and next term another "project" was begun, this time a "Woolworth" store. The same method was followed.

Other projects which have proved successful are stations (with paper-stalls, refreshment stalls, booking-offices, enquiry offices, etc.), docks, cafés, parks, theatres, the Zoo, toyshops, farms and Croydon aerodrome. It is essential that the 'project' should lend itself easily to continued enjoyment and use. If it is a park, there must be shows to see such as animals in cages or a greenhouse for which you pay an admission fee; and things to buy, such as guides to the park, refreshments, etc. It is equally essential that the children should be drawing on their own experiences, that is, that they must be taken to see what they are attempting to make, and must be encouraged to use every chance to find out more about it. Parents are perhaps the great sufferers in this method of teaching, for an enthusiastic child is a relentless researcher.

The teacher gives instruction as the children need it. They want to make money—then they must look at coins and copy some of what is on them; they want to use money—so they must learn to value and to reckon; they want to send letters—so they must learn to write legibly. They write notices and must be able to read them. They need to tell the time; they need to draw and colour pictures for picture post-cards; they must talk clearly if they use the telephone, and they must read the instructions and learn to measure three minutes of time. It is clear that there are endless 'skills' which children will want to learn and which they will have compelling opportunities for learning. One child

developed a precocious ability in making railway time-tables based on actual distances and rates of transit, and did an amazing amount of first-hand research to acquire the necessary information. He learned more in a few weeks about reckoning in money, distance, and time than a year's ordinary arithmetic would have taught him. Another child developed a passion for animals and made scores of different species in flat cardboard, named them, and knew what to feed them on. He was the "keeper" in the Park Zoo. He hunted through picture-books and newspapers, insisted on being told 'animal' stories, and showed a remarkable all-round improvement in reading and writing as a consequence of this natural 'urge'.

One of the most interesting aspects of the method is the power it has to develop unsuspected powers and interests in the children.

The further advantages that the children gain from the experience are obvious, but no less important. There is real co-operative effort and sustained responsibility, use of language for some essential end, and gradual extension of purposes over an increasing period of time with growing ability and desire to concentrate on the task in hand. Finally the teacher as a dominating force is dethroned, she becomes instead a member of the group, a leader because of her wider experience and greater skill; but one *with* the children's purposes not one who is dragging them unwilling along a road over whose dull walls she can see but they cannot.

The enthusiasts for the method claim that it acts as a useful corrective to the too prevalent "individual"

work. They would give almost all the school time to it, and let reading, writing and number come solely as natural by-products of it, omitting practically all formal teaching in these subjects.

Such a procedure is possible under certain circumstances, i.e. with very small classes, and rooms in which the "Project" can be kept and leave space for dancing and other activities. With classes of 40 or 50 children many teachers feel that they have not sufficient time in which to give the instruction to individual children and small groups which would be necessary if all teaching were done in connection with the "Project", and only as the need clearly arose. But there is no reason why the "Project" and "individual" methods could not be used concurrently; and the "Project" be a perpetual interest and purpose giving reality to activities which, though learnt and practised in more formal lessons, could be used and tested in the free activities of the "Project" itself.

Lack of suitable space or a mistaken ideal of school discipline are the chief hindrances to the development of the method. If classrooms are used for evening classes the children's work and arrangements are interfered with. Unless there is floor-space, movement is difficult. If the teacher thinks it necessary to have children sitting in rows in front of her, she will never take kindly to the method, and had better leave it alone.

So also had the constitutional muddler, or the teacher who adopts fads without believing in them or realising their implications. If the "Project" idea is forced on

the children, if it is used as a means of showing off precocious powers to parents and visitors, it quickly degenerates into a futile and formal performance, far worse than the old straight forward teaching which, if misguided, was at least sincere.

### EXERCISES

- 1.—Describe a "project" suitable for children of 5-6 years, and indicate what good you think they would get from making it.
- 2.—What difficulties do you think the following types of children would present to a teacher using the "project" method? The selfish, the inarticulate, the domineering and the lazy.

## CHAPTER XI.

### READING AND WRITING



READING and writing are both conventions. Number is a quality inherent in things themselves, and can be very early recognised by children. Reading must be specifically taught, and the very idea which underlies it is not apprehended till a certain age. Moreover, it must be remembered that logically writing precedes reading. One cannot read till the words have been written, and any attempt to separate the two processes decreases the interest of each, and renders reading in particular difficult to comprehend.

Reading and writing are so familiar to us as adults, and entered so early into our lives as members of a civilised community, that it is only by an effort that we can see them for what they are. The following account written by a man who was shipwrecked in the Tonga Islands, when they as yet knew little of the white man's ways, illustrates the primitive bewilderment which writing causes :

" Mr. Mariner, having heard that European ships more frequently touched at Tonga than at any of the other islands, had written an English letter addressed to whomsoever it might be, stating the circumstances

of his situation, and that of his companions. . . . This letter was brought to Finow. When it was put into his hands, he looked at it on all sides ; but not being able to make anything of it, he gave it to Jeremiah Higgins, and ordered him to say what it meant. Higgins took the letter and translated it into the Tonga language. . . .

" The mode of communicating sentiments was an inexplicable puzzle to Finow . . . at length he sent for Mr. Mariner, and desired him to write down something. The latter asked what he would choose to have written ; he replied, put down me ; he accordingly wrote *Feenow*. The chief then sent for another Englishman who had not been present, and commanded Mr. Mariner to turn his back and look the other way. He gave the man the paper, desired him to tell what that was : he accordingly pronounced aloud the name of the king, upon which Finow snatched the paper from his hand, and with astonishment looked at it, turned it round, examined it in all directions. At length he exclaimed, ' This is neither like myself, nor anybody else ! where are my legs ? How do you know it to be I ? ' "

We can see something of the same sort in the mind of a little child. A baby of two years six months says to you " Write me a house ". You write *HOUSE* and he protests that this is not what he wants. You say, " Shall I write a house or draw it ? " and he is puzzled, only to be appeased when the conventional house is *drawn* for him. The use of the word " write " is here simply a mistake. The child knew the word, knew that it meant the action of making marks with



a pencil, and had no idea beyond the drawing. He did not recognise the written word as being anything. The idea to which the original request should have referred simply did not exist in his mind. He was in the stage represented by the picture writing of many early nations.

But adult picture writing differs in this from a child's representative drawings, it rapidly acquires a significance beyond the meaning of the object it represents. A child's drawings are conventionalised and in that are like picture writing ; but for a child a bird is a bird, not the symbol of a deity, or a representation of strength and courage. Indeed a child has gone but a little way in the direction of representation. He has learnt that the spoken word signifies the thing, but he has not gone the further step and taken signification at two removes and understood that the written or drawn symbol signifies the word which signifies the thing. Thus up to a certain age there is an absolute barrier that prevents a child from learning to read. The baby mentioned above was, at about two years ten months, quite unable to grasp the representative function of letters. He knew his letters but he knew them as individual things—this is A, much as that is a chair. He had no idea that by assembling letters you got a word which meant something. If you put CAT together, and told him that it was *cat*, he simply was not interested, and did not comprehend. He had, in fact, not yet reached a stage at which reading was possible. Yet he knew all his letters and delighted to pick them out and name them.

The existence of this stage in learning to read

effectively disposes of the idea that when once a child knows his letters he can proceed to read, and also shows that there is for each child an age below which he cannot learn to read, however forward he may be in other ways. Reading, like so many other accomplishments, depends on the maturing of a certain mental power. Just as a child could not learn to arrange a set of graduated cubes in order till one day the time had come and he never made another mistake, or as another struggled for over a year to learn to talk and then in a month or so acquired a large vocabulary, so learning to read must wait until the time is ripe and then it proceeds quite quickly.

The age at which a child is ready to learn naturally differs in children. The lower limit is between three and four, the upper may be seven or eight with normal children, or never with mental defectives. In the last generation, or the generation before, clever men could frequently read fluently before they were five. One man, known to the author, amused himself during the slow voyage to the Cape in a sailing ship by reading *Pilgrim's Progress*. He was five. Another used to read the Psalms at three. John Stuart Mill, that paragon of precociousness, thus records his advance to learning. The humble art of learning to read English was acquired so far before the dawn of memory that it is unrecorded. He spoke only of the Greek. "I have no remembrance of the time when I began to learn Greek, I have been told that it was when I was three years old. My earliest recollection on the subject is that of committing to memory lists of common Greek words with their signification in English, which

my father wrote out for me on cards." By the time he was seven he had read six of Plato's dialogues, including the "Theatetus," which last he considers as rather too hard for a child of that age.

These children were forced to learning: other children become acutely aware of the advantages of books and beg to be instructed, and their progress is amazingly rapid. One such child, aged four, had long been pestering his parents to teach him to read. Running about after his mother he would say: "*Teach me to read, why can't I read?*" But nature was too strong for him, for, although he knew his letters, he could not read. Then one day he understood, his father showed him the trick, and by nightfall his wish was accomplished.

On the other hand there are quite clever children who do not learn to read till they are over six. This is generally due not to any lack of power to read, but lack of will. They find that their parents will read to them, or tell them stories, and so they do not take the trouble to learn for themselves. Other, genuinely intelligent children, are hindered by some specific defect, and do not live it down till they are perhaps ten years old. The most obvious cause for late reading is defective eyesight, and a child who learns late should always be tested for this; but there are also psychological factors which operate. One child whose subsequent career included second class Honours at Oxford in Engineering could not learn to read till he was nine or ten. His school worked, his family laboured, his eyes were examined. Then slowly he learnt. But the reason which had made the task of

learning to read one of abnormal difficulty remained. He has exceptionally weak visual and auditory imagery. He cannot learn any language without entirely disproportionate labour. He still cannot spell English up to the level of an average adult, and though he is entirely successful in his calling, and can write a letter with real flashes of literary merit he is nearly driven insane by the necessity of learning a little elementary Urdu.

Teachers must therefore remember two things—the age for teaching reading probably varies very much, and that slowness in learning to read—even excessive slowness—does not necessarily mean any lack of general intelligence, or indicate that the child will not become extremely competent, at a later stage, along the line of his proper abilities. The inconvenience which arises both for the child and the school from a failure to read is very great; but, where a child seems unable to learn, the school should make such arrangements as it can, the simplest being to seat the child next to the best reader in the class and allow one to help the other. As will be indicated later, inability to read does not necessarily mean inability to write, and though the writing is naturally misspelled, it is a step towards reading.

The child from an even moderately educated home comes to school already far advanced towards the art of reading. Long before he is ready to read himself, the idea is present in his mind and he knows what to expect from books. He has seen his parents read, and has been read to, and has watched his mother writing to Daddy, and added his own lines of scribble. The

bewilderment of Finow has no place in his mind. Generally the desire to read is definitely connected with the desire to be able to explore books for himself. The clever, active child has an early need of books. His mind cannot draw sufficient material from the ordinary experiences of daily life, and such a child—even in the most favourable surroundings—sneaks off to enjoy the adventures of other minds and to experience happenings beyond his range of vision. The cleverer the child the earlier will this need be felt, and the more readily will he learn, knowing what delights lie ahead of him.

It is therefore necessary in a school where little home training is presupposed to familiarise the child with the ideas of books and reading. Sometimes an explanation is necessary, though usually the mere fact that the teacher refers to books is sufficient indication. This is one reason for *reading* stories to quite small children—at least occasionally. They then see that books contain stories, and the brighter ones will come to the conclusion that to enjoy stories one must read books. This impression, of course, ought to be strengthened by the literature that children are given to read themselves. It should have meaning from the earliest possible moment, and every method of teaching should be checked against the principle—is this likely to make reading seem pleasant and important to the children?

It can be plausibly argued that writing preceded reading in the history of the race, and should do so in the individual. In so far as the two did not proceed concurrently, writing *must* have been first, but its primacy can only have been a matter of developing

slightly in advance of reading, and the two must have kept pace almost exactly. The important fact is that the idea which underlies both comes out most clearly in writing. Essentially reading and writing were invented for the communication of information to someone remote in space or time. The kings of Assyria put up monuments with the tale of their conquests, so that all men might know of it. When Cortez landed in Mexico an account of him, his horses and ships, was sent to Montezuma in a letter written in the picture writing of the day. It is, of course, possible that the earlier writing arose from the representation of divine attributes to be worn as charms, but if this were so, if engraved seal and carved pillar were the true ancestors of our writing, that primary use was so soon overlaid by the other that it has left no conscious mental mark on us to-day. It follows that the natural introduction to reading and writing is the letter, and, partly because it makes him feel grown up, a three-year old in India will become acutely interested in the mail, and weep bitterly if his elder brother receives letters and he does not. When he receives his letter he holds it upside down, and "reads" it with every sign of satisfaction; so too, one of the best means of oral composition in the upper classes of the Infants' School is the "letter game" described elsewhere, and all through the Junior School letter writing, provided that the letters are really put into envelopes and "posted" is a most useful exercise. In the Infants' School the first beginnings of both reading and writing can be taught by the "message to Mummy" type of lesson.

Unfortunately for teachers and children English is not spelled phonetically, and in spite of the half-hearted American attempts at reason over such spellings as "Hi-wa" or "Nite" we still stick to our unreasonable "ighs" or "y's". It is English spelling which causes the main burden to children in school, and it is the spelling, coupled with the irregular accentuation of words, that has prevented English from becoming the international language for which its simple grammatical structure so well fits it. The English child must do more than learn the letters and sounds. It must learn a large number of words as visual or kinesthetic wholes, because the spelling is such that any phonetic system is set at defiance. It is not only that we have some forty-four sounds to twenty-eight letters, it is that we have combinations of consonants that produce a simple sound; letters which have diverse sounds in different words, and different letters which produce the same sound. As an example, there is *a* in *father*, and *ball*; *gh* in *light* or *cough*; the "ee" sound in *meet* and *meat*; the difficulty of *key*, *quay*, and countless more. The reading of English is a puzzle both to the child and the foreigner.

But from the point of view of theory it is interesting to see how the two cases differ. The complaint of the foreigner is that he cannot pronounce the words he knows by eye. The child, though he can say the words, cannot recognise them when written. The first thing therefore that a school must be sure of is that the small child knows the words he is asked to read.

If one wishes to study the follies of mankind (an attractive but largely unprofitable subject), reading

books of a certain antiquity are admirable subject matter. In the *Teachers' Handbook to ———'s Phonic Series* (published by one of England's justly respected publishing firms) the following passage occurs: "It is not necessary, though desirable, that the pupils should know the meaning of the words they are sounding, but an explanation now and again of some word that would come within their understanding, and that would be profitable for them to know, adds to the interest of the exercise." The publishers have not dated this book, but it is not of any great antiquity.

If a child knows, as he should know, every word that he is likely to meet in his early reading, many difficulties are saved. An adult when he is reading does not scrutinise the word, he recognises the general shape of the word, and he fits it into the scheme of its context. He knows the word, both as a sound and as a visual image, and he passes from the briefest glimpse of the printed symbols to the word or to its meaning. How little we really look at words in ordinary reading becomes clear when we have to read proofs. Then we must adopt a certain attitude of mind, or better still employ some device such as reading with a ruler, or even reading backwards, before we can force ourselves really to attend to what is printed.

The child, not being a proof reader should be led to read in the ordinary adult way as quickly as possible. He needs to attend to general form and sense and not to be engaged in "sounding" words letter by letter, when he does not know the meaning of them, still less the general sense of the passage. If an adult meets in his reading a word he does not know



he tends to "skip" it, and when he wants to ask someone about it afterwards, he finds that he has forgotten it. The printed letters in themselves make little impression on his mind, they are only meaningful when they form a direct connection with words already known. It follows even more strongly that a little child, with no developed interest in words, will only learn to read words he does not already know with quite excessive effort and difficulty. Therefore the first step in learning to read must be to learn to talk, and the reading vocabulary should at first be well within the spoken vocabulary. The case is very different later. From twelve or so onwards, and especially with adults, the reading vocabulary is several times bigger than that normally used in speech.

Of all the would-be psychological principles that have worked havoc in education none have done more harm than the doctrine that mental development proceeds from the simple to the complex. This theory which is, as far as can be ascertained, totally false, has dominated the early teaching of reading, writing, drawing and any number of other subjects. The fact is that the simple is the result of centuries of labour at simplification. Many primitive languages have retained the sentence-word so that they express a complete personal situation by one sound or set of sounds, and when that situation varies, alter the whole phrase. Thus it is one thing for a man to beat me, and another for me to beat a man. The situations are entirely different, and the primitive language expresses them by entirely different sounds. We have reached a stage when the same sounds are merely arranged in

a different order. "The nature of the personal noun and the effective working of personality will be better understood if the method necessarily pursued by a language based on personal conceptions only is briefly considered—advanced languages are both analytic and synthetic; they take the thought to pieces, and reproduce it in a re-united form. Language in its infancy could perform neither processes; it had not reached the stage at which certain sounds are definitely assigned as "names" to concrete objects—it simply strove to express the connections perceived or understood, which the mind recognised as subsisting between different persons or things".<sup>1</sup>

Long after man had broken up his primitive sentence into words traces remained and it was felt that words must "agree" and an adjective must differ according to the noun it qualified. Bonus, Bona, Bonum—all boys learn at school. *We* can call men or women *good*, without feeling the necessity to change the adjective. So with verbs, they agree with their subject in all inflected language; our verbs only do it to a small degree.

In the same way the word has gradually become divided into letters. Early words were expressed by a single sign, later writers invented a syllabic script, and the latest method is the alphabet which more or less represents the ultimate sounds of which language is composed.

Now owing to the principle given above education started at this end of the process and worked backwards. A child was made to start with letters, the meaningless

<sup>1</sup> E. S. Payne, *History of New World called America*, p. 114.

results of age-long analysis, and then he passed to syllables, so to words, and lastly to meaningful sentences. The history of the teaching of reading in the last twenty years is a gradual mounting of the scale, so that successive systems have passed from letters to syllables, then words, and now at last we are back at the beginning with the sentence and propose to lead the child along the same track as the race—only rather faster.

The best conception of the method of teaching reading based on the alphabet can be formed from studying a reading book, published by a leading English firm, and dated 1928. It is impossible to believe that the book was first written in that year, so we can only conclude that continued demand made the re-hash of old material desirable. It is therefore probable that there are schools which still continue to teach in this way. The same firm also publishes *The Nursery Book*, containing all the two-letter words in the English language. As this has had a history of some seventy years, it is to be supposed that it finds a place in some schools.

#### NOTE TO TEACHERS

“ It may be useful to say a few words as to the principle on which the First Primer has been constructed.

I.—The letters of the alphabet instead of being arranged in their usual order, have been grouped in the order in which they are easiest to learn. The letters which are made with not more than two straight strokes are taken first ; then the letters made with three straight strokes ; then those with four and then

the curved letters. And it is suggested that they should be taught in connection with kindergarten stick-laying. The learning of the letters and the making of the letters would thus go together and form a pleasing exercise.

II.—After the alphabet come the words of two letters, then words of three letters of regular notation, the short sound of the vowels being adhered to, so as not to confuse the child at this early stage with different sounds to the same sign.

III.—The word-building exercise at the beginning of each lesson should be read by the pupils, first down the columns, then up, then across, and the sentences should on no account be read until every word in the columns is known.

If this method is followed, the progress of the pupils will be swift and sure."

The words and sentences to which this method leads are as follows and it might be thought that the latter, as well as the former, might be read down, up and then across without any loss of meaning.

" an	on	in	go
am	ox	it	so
as	or	is	no

1. It is an ox.
2. Am I an ox?
3. O no, I am on an ox.
4. Go on, ox, go on so.
5. Ox, go as I go.
6. Go at it, ox, or I go in."

The method represented by this book is false from every point of view. In the first place it is *not* easier

to learn the letter L than it is to learn B. It *may* be easier for a child with very weak muscular co-ordination to write it, but at any age when reading is taught either letter could be written. Nor is it easier to learn to read the word *on* than it is to learn *horse* or even *hippopotamus*. In all probability *on* is the hardest of the lot, because it is so like *no*, *ox*, *an* or a great many other words, whereas *hippopotamus* has the merit of distinctive shape. Besides *on* is uninteresting, while the other is not. The small child, learning naturally by eye, relies on the shape of the word to tell him what it is, and may suffer miserable indecision, and always decide wrong over the small words while sailing easily through the big ones. The author remembers many tears of her childhood because when aged four or five she could never distinguish *the* from *this*, and the teacher used to rebuke her for carelessness. A page composed of fifteen two-letter words is almost impossibly hard. Moreover, it is necessarily senseless. The lesson given above is as nearly meaningless as possible, and the last sentence can only be understood at all by reference to the picture which adorns the top of the page. The artist had a certain sense of humour, and a certain power of thought which had not apparently been vouchsafed to his collaborator.

All these are modern objections. They did not occur to the early critics of this method. Their thoughts were directed to another point. If you spell a word in English, using the names of the letters, you are a little nearer to knowing the sound of the word, but not much. See—ae—tee does not sound much like *cat* and

a child may be forgiven for not passing from the one to the other. There is rather more chance of success if he *sounds* out the letters k-a-t. Therefore, the *Phonic* method came into being. At first it was rather half-hearted, as is clear from the *Teachers' Handbook* quoted before. "The names and the sounds of the letters should be taught together. There is no obstacle to progress if the pupils know the names of the letters as well as the sounds from the beginning. If only sounds are taught at the start difficulties arise very soon. The objection which is made to teaching both together is that the pupils will get confused between the two when sounding the words. That never happens if they are taught to distinguish between the name and sound of the letter.

"When beginning to join sounds to make words, inform the pupils that in order to get the name of a word they must 'say the sounds'. The reason for sounding out, is to find the names or sounds of the words. Be sure the pupils understand this, so that they may take an intelligent interest in the exercise. Always make them say the name of the word after sounding the letters."

The essential defect of the method is betrayed by the last sentence, and that defect is emphasised by a sentence that occurs further on. "When the pupils are well advanced and able to do fluent reading, the teacher will notice a tendency to guess at a new word, instead of sounding it. Be most particular in checking this, as it is a great hindrance to progress." The teacher is not really interested in meaning; she is not encouraging her children to read for sense, she is teaching a

method that is based on the elements of words and not on the movement of thought.

Moreover, even from its own point of view the phonic method has failed. The ordinary sounds of the consonants were taught and the *short* sounds of the vowels. There remained a large part of the language that was composed in whole or part of the irregular sounds of consonants or the long vowels or diphthongs. Had the children been taught to recognise words as wholes there would have been no trouble. The child knew how to *say* the word, and the visual symbols just told him what to say; but on a phonic system he must "sound" out the word, and if he did so he would never recognise it. The first systems compromised. "Peculiar syllables should be learned in the old way—'t, i, o, n' sounds 'shun' should be repeated over and over. These can all be learned from sheet 27." Sheet 27 contains thirty-five such syllables as ion, tion, itions, xions, cial, ice, and ine, and thirty-nine words such as superstition, or incompatible. It is sad to think of a class of children chanting them over one after another in the prescribed manner.

As a result of this obvious failure two movements began, one to re-write English so that it could be read, the other to teach at least a certain number of words, as wholes, by sight alone. This second method will be discussed later. The first still lingers in different forms. Some books, e.g., those by Nelly Dale, retain ordinary printing and indicate special qualities in letters by means of colour. This produces a very pretty page but it increases the children's early difficulty. They not only have to learn *a*, but also red, yellow or

blue *a*, all of which are somewhat different in sound. When a child leaves off using coloured printing he suffers no handicap. This is not true of other methods in which the letters are actually deformed to indicate their sound. The degree of deformation varies ; where it is slight the child is asked to make fine visual discriminations for which he is as yet unfitted, where they are great, he must re-learn the letters in ordinary printing. An intelligent child will bitterly resent the waste of effort involved in this change. Moreover, the reading matter available in the method is very limited. There *may* be a reading book, but in all probability the children will be confined to sentences on the blackboard, and all spontaneity will be lost. The best that can be said for the method is that children ultimately learn to read by it ; which they do under any other system.

The next stage was a brief one. It seemed to teachers that children might as well learn syllables as letters and for a period unhappy children mourned over pages of

ab	ac	ad
eb	ec	ed
ib	ic	id
ob	oc	od
ub	uc	ud

and then were expected to combine them with initial consonants into pap, cap, tap, rap, map, nap, lap, slap, gap, sap, snap, yap. Some strange syllables were also heard—tup, nap, sud, etc., or such interesting disyllables as batted, shotted, banny or shilly.<sup>1</sup> A child's

<sup>1</sup> *A Syllabic System of Teaching to Read.* S. R. Blakiston, M.A., formerly H.M. Chief Inspector of Schools, 1898.



reaction to this method may be imagined; but it needs to be seen before its full implications can be apprehended. The persistency of educationalists is well shown by the fact that it was still a living method in 1908.

These methods, with the exception of the phonic, are all more or less historic in schools, and even the phonic in its purity is discarded. Teachers returned to words and now in many cases have achieved the full circle and start their children to read by sentences. Words may be taken first. The earliest teaching of whole words was as an adjunct to the phonic method in which the completely irregular words were taught by eye. "Look and say" is the school phrase. But it soon occurred to teachers that the first elements of reading could be made interesting, by the learning of suitable words.

The form in which this is now done is prescribed by individual methods, and is converted into a game. But, if the individual form of the method is described it must never be forgotten that it should be preceded by a group lesson in which the purpose of the apparatus is explained, and in which it is made certain that the children know the words with which they are dealing.

The simplest form is a set of pictures with names underneath, and loose names for matching contained in a box at the side. There are usually six pictures and words to a set, but the actual number must depend on circumstances. The exercise is to match the loose words to those beneath the picture. The principles which must guide the making of the apparatus are that it must be strong and durable and that it should be attractive. It is better to mount the pictures on ply

wood and varnish the whole thing, than to use cardboard which gets dirty and perishes. The box to hold the loose letters must also be fairly strong—or if match boxes or envelopes are used they should be replaced frequently. The pictures and general get-up should be attractive. There are excellent sets of picture-postcards of animals, trains or fruits, that could be used. Little black and white drawings of hats cut from stores catalogues are not pleasing. Nor are bad personal drawings. Also the choice of words is very material. There is no need whatever to confine oneself to cat, hat, or rat. The word is being recognised *as a whole* and variations of size and shape assist that recognition. But it is important to choose one's words with reference to the future. The reading book of the next class—provided that it is a suitable one—should be the basis of the early lists of words. If one goes beyond that it should be with a definite view to sentence recognition or to the phonetic use to which the words can be put. These early lists of words must be part of a consistent scheme which operates through several classes or the whole school. Hence the advantage of having some good graded series of reading books in use so that each teacher knows what is happening both below and above her. In one series to be mentioned later, the preliminary work is to learn thirty-five words. Some five of these are nouns and some five more are verbs that can be easily illustrated in this way. The other words must be taught by a different method. A teacher starting on this system would teach the thirty-five words required, and enlarge the children's vocabulary as far as possible by other words.

This method of matching is most easily applied to nouns; verbs are possible but they need careful illustrating. The best verb pictures are probably those in Kate Greenaway's *A. Apple Pie*, and tracings to provide many pictures could be made from a single copy. Children, even of two or three years find the pictures very attractive.

The group lesson on such a set of words and pictures consists in teaching the children what the written word says, in teaching them to match the loose cards to the written words, and drill in recognising and reading cards with the words on. The testing stage consists in giving the children duplicate cards of pictures, but without the words written beneath and seeing if they can place the loose words correctly in position.

Similar exercises can be done with real objects instead of pictures. The child has a box of small objects or toys, a set of name-cards, and possibly tiny menu holders. He arranges the objects on his desk and sets up the name cards in the holders beside them. This task is more amusing because the things are real, and therefore could be given every now and then as a treat. It is also good because manual dexterity is required to set the cards up in the holders.

A group exercise of the same sort is affixing names to the objects in the room, or a variation is writing the names of different children on the board and letting them come out in answer to them. The Teachers' Book of the *Beacon Readers*<sup>1</sup> contains a number of games suitable for teaching words in this way, and any ingenious teacher could think of many for herself.

<sup>1</sup> Published by Ginn & Co., Queen Square, London, W.C.1.

Concurrently with teaching individual words the children could learn sentences, and naturally the two parts of the work would be closely correlated. Words should occur in sentences, and the one should prepare the way for the other. Strangely enough, it seems to take a child no longer to learn to recognise a whole sentence than it does to learn to recognise a word. The general method of teaching a sentence is to have a picture with a sentence written by its side. Then a story is told which introduces the sentence several times, and each time the teacher points to it. Thus by the time the climax is reached, which is also the sentence, the class knows it by heart. They have also seen it till they know it by sight. In this way it is hoped that the children learn to read the sentence as a *whole* and it is certain that after a little practice children will recognise sentences, pick out those that match certain pictures—match one sentence to another, and “read” sentences that are shown them. To the visitor a performance of this kind is very impressive, but no one knows better than the teacher that such a class cannot read. They have learnt to say certain words on being shown a certain thing, just as a child will name a gramophone record that has a distinctive label. In neither case does the child read in the adult sense; and he is quite unable to read or recognise a single word taken from the sentence.

To be satisfactory the lesson must go further. If the teaching is careful the children already know some of the words in the sentence, and therefore can at once start the analysis of the whole by picking out the parts they recognise. This can be continued by children

matching separate words to the words of the sentence. For individual work the children have smaller cards and loose words to match. The final stage is when they can build up the sentence from loose words without a model to copy.

One important point in this type of lesson is the choice of the sentence. One of the originators of this method, fascinated by the rhythmic sentences of Tagore, taught her babies phrases extracted from his works. The modern teacher, less soulful, generally takes such sentences as :

The sun is sinking in the west.  
I bring to you coloured toys.

Lines of verse are also common.

In choosing sentences the teacher's aim should be to provide the children with an interesting thought, a collection of useful common words and a pleasing sound, and the rhythmic prose that they enjoy. Incidentally, she is to a large extent controlled by the pictures which are readily available. Normally the teacher requires her pictures in duplicate and that restricts her to such sources as the pretty illustrated "Readers" of the Clarendon Press,<sup>1</sup> which are cheap enough to be bought in pairs and then cut up. As the teacher needs a sentence a week at least, the difficulty of finding pictures, inventing stories and preparing all the apparatus is considerable.

Interesting lessons of this type can be made out of repetitive stories such as : *This is the house that Jack built*. In that case the illustrations by Caldecot are

<sup>1</sup> e.g., *Mrs. Strang's Infant Readers*. Clarendon Press, Oxford, price 2½d. For this one gets seven coloured pictures.

extremely valuable. These, like the *A. Apple Pie* book can be bought and copied.

In a few schools the sentence method is taken in its full rigour. Sentences are taught and, perhaps, divided into words; beyond this the school does not go. Children who leave may be able to read prepared material, they may even have a wide enough vocabulary to read a book, but they are helpless in teaching themselves a new word, and they have no notion of spelling. They either have a picture of the word in their mind and spell from the image, or else they are completely blank and know nothing. A class in this state in Standard I is a very great embarrassment to a teacher, who has to start all over again and teach a little elementary phonetics so that the children may at least know that *cow* starts with "c".

This phonetic work should begin quite young. It is probably better to postpone it till the children can read a fairly large number of words and have been trained for some time on the sentence method. In one scheme it is started concurrently with sentence-reading, but the two sets of lessons are kept quite distinct till the children have advanced to a certain point; and then both types of knowledge are used for further reading. The disadvantage of this is that early phonetic work, when the children know hardly any words, is apt to be dull. If started later, when the children have a wider vocabulary, it is more likely to prove interesting and useful.

Probably the earliest lessons should be a collection of words that all begin with the same letter and the discovery by the children, or a demonstration to them

that cat, cow, cart and candle all began with the same sound and same letter. Here and not earlier is the place for the illustrated A.B.C. The intent of the A.B.C. is to help children to recognise the sound of a letter from its association with a word, and the word is suggested by a picture. Teachers should be sure that the picture does suggest the right word. Too often the probabilities are all against a successful use. In one school there was a picture of two children sitting together reading a book, while a black kitten played with a ball of wool on the hearth-rug. The letter was T. The word supposed to be suggested by this picture was *twins*. In most cases there are less glaring errors ; after e has stood for *eggs*, and f for *fan*, g (which has a picture of a boy running) stands for *go*—and so on. Since verbs, as has been said, are so much harder to illustrate than nouns, the alphabet should confine itself to the latter. Even so there are pitfalls, and a picture of a pair of spectacles should not be labelled g. There are far less ambiguous pictures.

Besides the simple A.B.C. there are combinations of letters that should be known and illustrated, st, sh, ee, etc., and, if this work is taken when children already know how to read a fair number of words, lessons can often consist in letting the children think of words that contain a given sound, and either telling the words to the teacher, or building them with loose letters on their desks. Other games include re-arranging disarranged letters, e.g., making words from ALBET or PHSO, filling in missing letters, e.g., completing su-m-r or h-p-y. In these cases if six words are given, there should be some hint as to what the words are to turn

into—for example, a list of eight words written properly should be put up and the children told that the words they must make occur among them.<sup>1</sup>

Competitions can be organised, for example, one child can ask his opposite number :

“ Tell me something in this room that begins with T,” or the game can be played in the old form of “ I spy—” Other games include finding rhymes for a word, or thinking of words which contain somewhat the same sound.

There are certain well known stages and difficulties in this phonetic work. A teacher had better use the tables of words and sounds given in some such book as the *Beacon Readers*, than try to think of them for herself. The use of such a scheme ensures continuity of teaching through the school, and prevents important parts being missed out. Even with an ordered scheme there are certain points of difficulty, such as the teaching of *ee* and *ea* and such pairs of words as *meet* and *meat*. All that can be done is to see that children understand the words they are using, and do not make mistakes which may get fixed in their minds.

As soon as children have passed the stage of sentence cards and are beginning to know enough words or phonetics to be able to read for themselves, great problems arise. It used to be assumed that all was then simple. Children read from the class “ reader ”; each child stood up in turn and uttered sentences till he was told to sit down and let another take his place. This method was often continued till children were

<sup>1</sup> Further games can be found in *Everyday Words*. Alfred Wisdom. University of London Press.



thirteen or so. In the Junior Forms, an even worse method can still sometimes be seen to-day by which the class shout in iterated chorus. "Tom is my dog—Tom is my dog,"—following the words with their fingers. Neither of these methods should ever be used.

At this stage three types of lessons are necessary.

(1) Lessons in which a child's knowledge of actual words is extended. (2) Lessons in which he practises articulating words from the printed symbols. (3) Those in which he learns to read to himself for interest and information. It used to be assumed that the third type of lesson was only suitable for big children. This is not so.

Lessons of the first type are a continuation of those described before, and should be extended to include the teaching of words in oral composition and in all other lessons. The second and third types of lesson can be taken concurrently. At this age *abundance* of reading material is of the utmost importance, and to confine a child to the class primer is greatly to hinder his progress. Children should read a lot; and their reading be tested rather by asking for an account of what they have read, than by hearing them read a few sentences aloud; though of course this is desirable at times, and with the less skilful. Above all, this reading aloud should never be a class lesson. The individual children should read to the teacher, while the rest of the class read to themselves or are occupied otherwise. But each child as he changes his book or puts it down should be asked what he has been reading about, and should be expected to give at least a sentence or two of connected answer.

One school has a highly organised system in the

matter. The class possesses a large library consisting of dozens of rd. or 2d. books. Each child has a card and enters on it the name of each book he reads. The teacher briefly examines him to see that he knows something about the book he has just finished, and ticks his card. The children have surprisingly long lists on their cards, and read a quantity that would never be thought possible under other circumstances.

There is no doubt, however, that most children at this stage enjoy reading aloud to the teacher, and read quite intelligently. A friendly visitor will be besieged by children with their reading books who want to show off their skill.

This, like most other childish desires, is healthy, and children should have opportunities of reading to the teacher, and this practice in reading aloud can go on concurrently with silent reading. The class has its reading books, probably each child has a different one—and is working silently. The teacher calls out individuals and lets them read to her from the point they have reached in their own books. This reading is done quietly, and does not disturb the other children, nor does it greatly interrupt the child's enjoyment of his own book. If the teacher keeps records of the children she has heard read and their success, she has full knowledge of her class, and can hear most frequently those children who require most help.

Higher up the school the same system can be continued, but the place of the summary given verbally to the teacher as a test of the silent reading is taken by the answering of questions written on the board.

Writing nowadays never strays far from reading.

The pot-hook is out of date, and children long before they can read begin to copy letters and words on their boards. This copying helps to teach the letters they copy and both reading and writing progress together. Yet writing retains its primacy, and children will draw letters, or build up a word with loose letters at an age when they can hardly read the word they have produced. For very small children letters that they can trace with their fingers, sand trays in which they can draw, and wooden shapes round which they can make an outline, are all useful.

The preparation for writing is the learning of the shapes of the letters and the acquisition of the muscular skill necessary for guiding the pencil. Mme. Montessori taught these elements separately and encouraged her children to trace round letters with a pointed stick at the same time that they were learning to build up words with loose letters. For a time the two processes remained apart, but one day they joined.

"One beautiful December day when the sun shone and the air was like spring, I went up on the roof with the children. I was sitting near a chimney, and said to a little five-year-old boy who sat by me, 'Draw me a picture of this chimney,' giving him as I spoke a piece of chalk. He got down obediently and made a rough sketch of the chimney on the tiles which formed the floor of the roof terrace. The child remained for a moment as if on the point of bursting into some joyous act, and then cried out 'I can write! I can write!' and kneeling down again he wrote on the pavement the word *hand*. Then, full of enthusiasm, he wrote also *chimney, roof*. As he wrote he continued to cry out,

'I can write! I know how to write'. His cries of joy brought the other children, who formed a circle about him, looking down at his work in stupefied amazement. Two or three of them said to me, trembling with excitement, 'Give me the chalk, I can write too,' and immediately they began to write various words, *mama, hand, John, chimney, Ada*.

"Not one of them had ever taken chalk or any other instrument in hand for the purpose of writing."<sup>1</sup>

Some schools start their children writing in print and keep this on all through the Infants' School. This form of writing was urged on the world on several grounds; that it was more legible, more beautiful, above all that it correlated better with reading and the printed word. The first two reasons are patently false. The last would only be true if the print of books were revised to suit the script. If the need for correlation between print and writing is very strongly felt it is possible to buy elementary reading books printed in what would make a good writing hand. The great objection to print-writing is its comparative slowness; speed is nearly as important as legibility in writing.

The method has now been in force long enough for girls brought up on it to have entered Training Colleges. The opinions so far collected are violently hostile to it. The sufferers accuse it of having ruined their handwriting and caused them infinite annoyance. Probably if children were taught a very simple round hand from the beginning the practical advantages would outweigh the theoretic difficulties. In any case the correlation claimed is never complete. Children do not write

<sup>1</sup> *Montessori Method*, p. 287.

printed *a* or *g*, and many of the other letters only bear a general resemblance to the printed form, yet children learn *a* as easily as *c*. Moreover *d*, *b*, *p*, as used in the script are extremely confusing, but the round hand forms of these letters are most satisfactorily distinct.

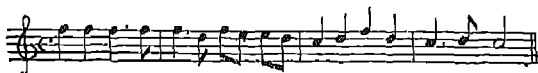
### EXERCISES

- 1.—Make a list of twenty-five useful “look and say” words.
- 2.—Make (a) a set of apparatus for a lesson on the sentence method ;  
(b) an illustrated alphabet.

### BOOKS

- |   |   |
|---|---|
| Huey  | <i>Psychology and Pedagogy of Reading.</i> MacMillan, 1908. |
| Annabella Clark                                 | <i>Sentence Method of Teaching Reading.</i> Arnold, 1929.   |
| Edith Luke                                      | <i>Teaching of Reading by the Sentence Method.</i> 1931.    |
| Articles in <i>Practical Infants' Teacher</i> . |   |

## NUMBER



NUMBER, and number ideas develop at a slightly earlier age than the power to learn to read. Reading is purely a matter of convention, number is a quality of objects themselves, and animals certainly recognise it to some extent. It is just possible to teach a dog to count up to five or so ; but even birds or cats know the difference between four eggs or kittens, and one ; and a cat who has had part of her family removed will show that she is conscious of her deprivation. Far more fully developed is the aspect of number connected with size. We can use number for counting separate things ; we can also use it for measuring single things, by themselves or in relation to each other. In schools the arithmetic of size is generally postponed till Standard II or later, when children are asked to measure their desks as if size were quite a new idea. The *exact* determination of size in relation to other units may be of later development, but size as it affects action is very early apprehended. An example has been given of a child who was unable to count, eagerly questioning his family about how far things were away, and whether if

he stood up he could touch the ceiling. This interest in distance followed closely upon his acquisition of the power to arrange a series of graded cubes in order of size, and was connected with his attempts to draw a series of graded lines. In these early experiments a child is learning two things. To recognise and use size, and to acquire the words which are used to describe it. Mme. Montessori has arranged various pieces of apparatus to help the child to classify these early number ideas. She provides him with graduated cubes or rectangular blocks to arrange according to size. She gives him graduated cylinders to fit into holes, she gives him rods, painted in squares to lay out on his desk according to length. These are purely formal exercises and are completed by learning the words, largest, smallest, longest, shortest, etc. They bear no relation to life, and the clever child tires of them very rapidly. For him the important part of this learning takes place out of school, and is acquired during the process of running about, jumping, climbing, getting things off a shelf in the cupboard, and so on. The knowledge is not verbal, and hence is not tested in school; but it is essential for life, and is, of course, shared with the animals. A cat knows to a nicety the height of a wall and the width of an aperture, and though she cannot state her knowledge in words, she acts in accordance with it. So a child learns practically the use of objects in regard to their size and enjoys opportunities of practising his knowledge by movement and the conduct of small affairs. Where possible words should be added to this practical knowledge, but practice in action is the chief need.

Of the school activities that give scope for this practice the two chief are handwork for finer measurements, which can be done by children of six or seven ; and for smaller children, work in the class room, such as tidying up, putting things away in boxes, and seeing that the box is not too full ; stacking boxes away in the cupboard ; getting a stool to reach a higher shelf ; filling a cup from a jug of water, and exercises of a similar kind. All these activities prepare the way for definite knowledge and measurement later on. How necessary they are can be judged by the clumsiness of small children, who have not yet learnt them, and also by the eagerness with which children take up tasks which will tax their growing powers in these ways.

These practical acquisitions start before any conventional idea of number begins in the child, and we can see from animals' behaviour that they can reach a high degree of precision without ever being connected with it. But in normal children this aspect has only just begun to develop when the other aspect of number begins to present itself. This other aspect is counting. If a child is taught by his family, but has no formal lessons, he seems to want to count by the time he is about three years old. His early progress is slow, and his mistakes many, but he shows a definite desire to learn. At first he only knows the number names and does not attach any real meaning to them.

This learning of words before the corresponding concepts is very frequent. It shows extremely clearly in the names of time intervals. A child of four or five knows the words minute, hour, etc., but does not in the least know how long you have been talking to him.



So a child knows the words three, ten, etc., but cannot tell you how many marbles you have when you show him four.

This is the first point that requires care from the teacher. A child should be encouraged to learn the number names ; any knowledge is gain, but it should never be supposed that because he talks about " three " he knows what the word means or that he can count.

In counting, two factors seem to be involved. The child may not know the verbal series correctly, he may count one, two, four, five, ten, or he may not be able to discriminate the various objects to be counted. A little child will repeat the number names, point to the same object twice, and count it twice ; leave one or more out altogether, or just gabble over the names so far as he knows them, waving his hand vaguely over the things to be counted. None of these processes is counting, nor do they show that the ability to count has really developed.

It is no use therefore teaching a child to count. He must be left to learn ; but every facility should be given him for learning. The different means suggested could all be used concurrently, but no child should be forced to do number work when he is small, unless he wants to, and the different ages at which number concepts begin to develop make class lessons in number quite unsuitable for small children.

The names of the number series up to 12 or so can be taught by means of acting rhymes, such as " One, two, buckle my shoe, etc."

There are several such in books of nursery rhymes,

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and when children get a little older, reverse counting can be practised with such verses as :

“Ten little nigger boys sitting on a wall. . .”

The numbers between 10 and 20 are unfortunately irregular in their names (though they are written regularly) and must be learnt as the series up to 10 is learnt, but they do not really present much difficulty, and some of the rhymes go as far as 20. From 20 onwards the series is regular, and all the children have to do is to learn the names of 20, 30, 40. . . 100 etc. When once they are ready for the knowledge they learn it very easily, and there is no need for an artificial restriction to numbers below 20, or below 30, nor is there a need for elaborate special lessons such as one sometimes sees on learning to count from 30-40.

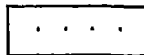
In addition to lessons including rhymes a teacher should always take any opportunity that presents itself to mention number. She should count over the children required for a game, the books she has, the flowers she puts in a vase and, when possible, larger numerals such as a hundred should be named. In this way children become used to the idea of counting. They also learn the words with which to count. The actual counting follows later.

After these two elements of counting, comes later the recognition of a group. The early stages need some such apparatus as a board with holes into which you place beads, or a card with coloured discs over which you place counters. The number of holes or discs in a row can be varied, and, if the teacher wishes, the written symbol for the number can be at the end of the

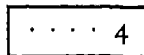
line. This exercise has the merit that it requires a certain amount of manual dexterity, but it is not self-correcting in any way, unless the number of beads supplied corresponds exactly to the number of holes and a child is taught that he should have none left over.

The counting of things with their numbers can be done very simply by threading beads, or by counting long lines of beads already threaded. Threading beads in groups of 3 or 4, etc., by colour is a valuable variant of the exercise, and one school had an ingenious piece of apparatus that required especially careful manipulation and was therefore particularly useful. In a board 10 uprights were fixed. In this case it was 10 slips of cane fastened in cotton reels. The child had beads that would just go over the cane. On the first she put 1 bead, on the second 2, and so on, up to 10. When she had filled the board she took it to the teacher, and counted the beads out to her and then removed them.

At a certain stage in counting the child begins to pass to the idea of a group. At first he has five things but not five. He has  $\text{|||||}$  but not 5, if we may so symbolise. The transition to a group begins when the figure 5 and the number picture begin to be associated together. The stages of the apparatus may be represented roughly as follows. Card with dots to be covered with counters.

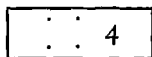


Cards with dots and also the figure.



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Definite number pictures and figures.



In the last stage the child is required to match the figure to its proper number picture.

There is much controversy over the form which the number pictures should take. The answer probably is that the form should be varied. We want the children to end by thinking in numbers, not in number pictures, and by varying the one and leaving the other constant, we can probably make the figure the stable element of thought. The two forms in most common use are those found on playing cards and dominoes. Playing cards have the advantage of being very easily obtainable, as many families are ready to give away packs which are still fairly clean, but have lost one card. The domino grouping by 5 and 10 may be more logical, but the card grouping in 3's and 4's also emphasises a useful aspect of the number series, and children like the colours and shapes. It is a good exercise to deal out a pack of cards, from which the court cards have been removed, and get the children to name the cards as they fall. The more advanced children name them by the group, the less advanced count. There are many other uses ; such as games of "snap", or, for the more advanced children, games where the player takes the whole pool when he turns up a card that makes, e.g. 10, when added to the one already uncovered.

Until children can count easily and readily, and recognise numbers as groups there should be no

further number teaching. It is particularly important that the pointless class lessons on a single number such as 2 should be avoided. If children cannot count 2 they are not ready for the lesson, and if they can there is no need of it. Nor does giving the lesson materially assist the power to count. Counting comes naturally when the child is at the correct stage of development, and the world is full enough of countable things without the teacher making a false and muddling fuss about a matter which is either transparently simple or wrapt in impenetrable incomprehensibility.

Nearly as bad are lessons on 8 in which the teacher "analyses" the number, telling an unresponsive class that 8 is either  $7 + 1$  or  $6 + 2$ ,  $5 + 3$ ,  $4 + 4$ ; sometimes to make it quite complete she goes down the hill again to  $3 + 5$ ,  $2 + 6$ ,  $1 + 7$ . These lessons are usually given to children aged 5 to whom 8 is just  $\text{IIIIIIII}$  and who have not learnt to think of those units as having any grouping. They simply do not understand the different groups which are put up with bewildering rapidity or utter slowness on the blackboard.

Miss Margaret Drummond has some tables to illustrate the development of the power to count in children who were receiving formal lessons in number, usually two a day, and in a child just left to learn for herself in a cultured home. The test consisted in naming the cards of a pack from which the court cards and the ace of spades had been eliminated. The tests were given at rather irregular intervals, and the table of comparative ages given on page 194 is correct to a month or so.

Ages.	M. Uninstructed.		E. Intellectual Home.		A. Taught at School.		W. Taught at School.	
	Time.	Reco. of grps.	Time.	Recog.	Time.	Recog.	Time.	Recog.
4.6	2.26½	All except 8 and 9						
4.9								
5.							5 3"	
5.3							4 9"	
5.6	1.42"		1.56"	All except 8 and 9	3.45"	Up to 6	3 15"	
5.9	2.16"		1 38"		2.57"			
6.								
6.3	1 28"		1.25"		1.32"		2 59"	Up to 7
6.6	1 31½		1.1"				2.40"	
6.9	(48½)*							

\* After a fortnight's special coaching.

This table shows that formal work in number has little advantage over what a child learns in a good home. On the other hand it is also clear that teaching does have a marked effect—when the child is ready for it. For example W. learnt a great deal in six months, and M. when specially coached for a fortnight reduced her time by more than half (see the last figure of the column in brackets). The most noticeable fact is that the children who had learnt most at home recognised the numbers in much larger groups than the children taught at school. The frequent practice of confining children for a long time to numbers under 6 is probably responsible for this. There is also the undoubted fact that these children differed greatly in natural ability. M. and E. must, from other facts supplied, have been clever children, A. and W. probably were not, and the range of knowledge possible for the two first was not within the scope of the two last. But this does not appear in relation to so simple an activity as counting. All learn to count with very much the same skill at the age of 7.

Concurrently with the later stages of learning to count children learn to add. The two activities begin together, and only diverge when the numbers are recognised as whole groups and added together by an effort of memory. The small child when asked to add simply counts, first one number, then the other, and for a long time he cannot be induced to do anything else.  $4 + 3$  is the sum; a six-years old starts with one or the other and adds "one, two, three, four, five, six, seven." He will not say "*four*, five, six, seven." He must begin every time at one.

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It is as hard to give an exact reason for a child's conduct as it is for an animal's, but there may be two explanations of this. The child may only know the number series as a whole, in the same way that some folk know their multiplication table, and he cannot start correctly in the middle. Or he may not recognise four as a group without counting to make sure. Recognition of a number as a group comes later by far than the power to count, and practice will enable a child to add by the counting method long before he recognises all the groups successfully.

Somewhere about 6.6 the brighter children begin to add in the adult fashion by taking the two numbers as groups and performing an act of memory to discover their sum. The intermediate step is the taking of the *larger* number as a group and adding the smaller to it in units or larger fragments. This half-way step is sometimes useful with numbers such as 8 and 7, when 10 is to be passed; so that the child can say 8 and 2 is 10 and 5 is 15. But it is a method that is clumsy and far inferior to a genuine knowledge of the sum of the simpler numbers. Many adults, however, either from defective teaching or lack of practice retain its use all their lives.

Since successful addition depends largely on memory, it is a thing that improves greatly with practice. This is so both with children and adults. A person of average intelligence may easily improve 100% or more if forced, for some reason or other, to do sums in simple arithmetic for two or three days. The same is true of children. Intensive practice with some adequate motivation can produce results. The only



question is if the time spent in practising the activity might not more profitably be used in some other way.

On the other hand such time as is spent in number at this stage might well be given largely to real practice in memorising number combinations. Teachers too often forget that arithmetic has two sides, it has its concrete side, which at this stage is generally represented by counters and beans, and it has its abstract side represented by figures and number pictures. A child's behaviour in relation to the two sides is very different. This can be seen in giving a child a sum to do in division practically and on paper. A class may be quite unable to work the sum  $4/\underline{12}$ ; but call out four children, give one 12 sweets to divide amongst the four, and the division is accomplished at once. In order to calculate, a child must pass from the concrete stage to the abstract, and it is the teacher's business to get him from one to the other with the minimum delay. In the past there was no delay, with the result that the child having no practical understanding of the work often never understood anything at all. With newer methods the figment of concrete work lingers on in a perfectly useless way. As soon as a child counts, he is passing beyond the concrete, he is rapidly leaving it behind when he starts to add; but the concrete fiction remains.

It is common to paste a picture of a hen on a card and underneath write :

$$\begin{array}{r} \text{Hens} \\ \hline 7 + 2 \text{ etc.} \end{array}$$

This is supposed to make the matter concrete and interesting. It probably does the latter, it probably

does *not* do the former, and it would be unsatisfactory if it did. By the time a child has reached written addition sums his counting has become mechanical and abstract. Hens, if they are visualised at all, are an intrusive and distracting element. Probably they are not visualised and the teacher has wasted her time writing the word.

On paper these "hens" do not do much harm. They are the curse of oral work. A teacher begins "I went into a shop and what *do* you think I saw, 10 boxes of paints. Now I have four little nephews, John, Tom, Harry, and Bob, so what *do* you think I did? Bought them a box each, now *how* many had the shopman got left?" It is the rarest thing for a class to be able to answer such a sum. Either they have grown interested in it, and are wishing that they had a paint box or are speculating on the four nephews, or, being used to this flow of talk and knowing that no good comes out of it, have drowsed off into vacancy. If you ask the same class the plain abstract sum  $10 - 4$  a host of hands go up. Everybody knows and wants to answer. Oral practice in dealing with numbers is very valuable. It should be rapid, abstract, and always to the point.

Written work is done generally from cards graded to suit the requirements of the groups in the class. The chief point of controversy is the form the sums should take. In many schools it is the custom to write the sums as equations:  $7 + 2 =$  This is a convenient form while children are dealing with single numbers, and it can be read off in a way that corresponds closely with reading sentences, but it is a hopeless form

when children come to deal with  $175 + 93 =$  and it is as easy to teach children to read  $7 +$  as the other form.

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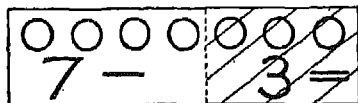
Both are in any case arbitrary symbols.

Mr. Ballard is emphatic in his book *Teaching the Essentials of Arithmetic* on the merits of the King's Highway, by which he means teaching children *from the beginning* to do things by methods that can be continued all through their life. The position of the numbers in an addition sum is one of the small points that may as well be taught correctly from the start.

With subtraction a difficulty of a very different sort enters. We are taught to count forwards, but not to count backwards, perhaps because we do not know where to start the backwards series. Small children might count backwards from ten or twenty, and then the difficulties of early subtraction would largely disappear. All they would need to do would be to count downwards from the larger number, just as in addition they count up. Further addition and subtraction might be taught for memorising as complementary processes, just as multiplication and division are. If a child has ultimately to memorise the fact that  $4 + 3 = 7$  there is no reason why he should not learn as part of his practice that  $7 - 3 = 4$ . The three numbers would thus become associated together in a closer and more intelligent way than if only the addition were learned.

If children are not taught to count backwards subtraction has to be demonstrated by some means or





other. It must, of course, be shown practically with beads, etc., for some considerable time before children begin to work with simple numerals. But the first steps of the formal sum also require demonstration. A very common form of apparatus consists of a set of cards in a box. One card is the standard of minuend, e.g.



and contains the form of the equation. The other cards are smaller, contain the subtrahend and are of a size to cover an appropriate number of dots (see shaded card and figure in picture). The answer can then be read off from the dots that remain uncovered. This method will automatically produce correct answers, whether the children learn anything from it is doubtful. It does, however, familiarize them with the form of a subtraction sum. Unfortunately, like the equation form in addition, the sum has to be altered in appearance as soon as it has been learnt.

The next stage in subtraction has seen the fiercest educational battle for many years. How is a sum such as  $31 - 24$  to be worked? When the child has taken 4 from 11, adding a ten to supplement the one, is he to subtract 1 from the 3 saying later 2 from 2; or is he to add one to each line, saying later 3 from 3. The former is the method of decomposition, the 30 being decomposed into  $20 + 10$ . The latter is the method of equal additions which will work, but can

only be clearly explained to a person of some mathematical knowledge. It seems to have been proved that the method of equal additions is most satisfactory in practice, and Mr. Ballard affirms that he never finds a school noticeably bad in subtraction without also finding that they use the decomposition method. The trouble of teachers was that they found it extremely difficult to demonstrate the method of equal additions correctly, whereas the other method is extremely easy to show. But Miss Monteith has devised a box which does it beautifully, and the child will probably be satisfied by the explanation of "justice" if he asks, "Why one *each*?"

		
○ ○ ○	○ ○	○
		
○	○ ○ ○	○ ○
1	9	9

$$\begin{array}{r} 321- \\ 122 \\ \hline 199 \end{array}$$

The dotted boxes or bars indicates the extra ones added to the lines. The teacher must take care to see that the added elements are not placed *vertically* under each other.

Multiplication is also counting, but counting abbreviated in a certain way. It can be practised in the early stages by threading beads of different colours in threes etc., etc. and later counting them. Tables can

also be built up by using counters on a card and following a chart of numbers arranged, e.g.

oo.	oo.	or o.	o.	o.
oo.	oo.	o.	o.	o.

or in any number of variations.

The best method of encouraging children to be rapid in the early stages of multiplication is to encourage them to learn to count in two's, three's, fours etc. It is not difficult to learn to count 2, 4, 6, 8, etc., or 3, 6, 9, 12, etc. It greatly facilitates the early stages of multiplication.

When once the idea of the tables has been grasped the next thing is practice. As in all simple arithmetic the fundamental thing for speed and accuracy is a good memory of the figures and of their combinations ; and these memories cannot be formed without special practice. It is possible by continual practice to achieve almost any degree of facility, but for most people a fair proficiency is adequate, and the time which would ensure greater skill is better spent in some other way. Therefore the teacher has to decide how much time she can legitimately occupy in teaching the multiplication table. Practice periods are only effective if they are short and vigorous ; long or dull lessons accomplish nothing.

Division is one of the arithmetic processes that is noticeably easy to demonstrate concretely, and it is an activity that comes naturally to children. They quite understand dividing out objects among a group. The very earliest stage is giving one each all round the group, and then another one till the total number is exhausted, but if the children are really ready to

learn division they are already thinking in groups, and unless badly prompted by the teacher will calculate directly—if the numbers are small—how many each recipient can have.

At this stage there should be no remainders, and the numbers should go up as high as the children can conveniently think. There should be no artificial limiting of the numbers. At this stage also the connection with multiplication should be made. What has been distributed can be recounted, and the two forms of the sum written up on the board.

The introduction of the remainder cuts division off from multiplication, and somewhat removes it from the realm of true experience. If there are three children and eight sweets the last two do not remain uneaten in the bag; fortune or strength decides who shall be the unlucky one, and go without at the third distribution. The work at this stage is becoming formal and abstract. But there is still no need for artificial limitation of numbers—so long as the numbers used are within the child's power to count;  $15 \div 3$  is quite a possible sum, and does not need an elaborate scaffolding of T and U, and bundles of sticks to tie and untie.

The last matter that can be conveniently tackled in the Infants' School is money, and this should be taught on a purely practical basis. Money is already beginning to take an important practical place in the life of the child of six and the school should help him with cardboard money, toy shops and questions like "how many pennies in six pence?" "How many pennies in this?" a coin being held up. There should

be no theory, and no formal abstract sums. The theory that twelve pence=one shilling, twenty shillings=£1 is too difficult and too unlike the work in tens and units that he has been doing. But ability to use numbers in practice can be well established before there is any confusion due to written work or learning of tables, just as many children learn to speak their language correctly before they have ever heard of grammar, or can write without spelling mistakes.

### EXERCISE

- 1.—Plan and make (for two children) a set of number apparatus for teaching (1) the elements of number, (2) subtraction.
- 2.—What are your views on (a) the utility, (b) the attractiveness of arithmetic.
- 3.—Are you good or bad yourself at arithmetic? To what do you attribute your success or failure?

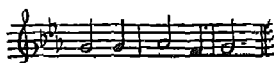
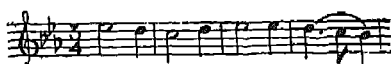
### BOOKS

- |                    |   |
|--------------------|---|
| B. B. Ballard      | <i>Teaching the Essentials of Arithmetic.</i> University of London Press, 1928. |
| Margaret Drummond  | <i>Psychology and Teaching of Number.</i> Harrap, 1922.                         |
| McLellan and Dewey | <i>Psychology of Number and its Applications to Methods of Teaching.</i>        |
| Board of Education | <i>Teaching of Arithmetic in Elementary Schools.</i>                            |
| A. Monteith        | <i>Teaching of Arithmetic.</i> Harrap, 1928.                                    |
| Herbert M'Kay      | <i>A Child's Book of Arithmetic.</i> Methuen, 1914.                             |
| Clark Otis         | <i>First Steps in Teaching Number.</i> Harrap, 1929.                            |



## CHAPTER XIII

### GENERAL KNOWLEDGE



THE child, whose nursery life was described earlier in the book, is now five years three months, and attends the garrison school at Karachi, India. The instruction he receives fills him with delight, and when he is inoculated for typhoid he has to have his dose on Wednesday so that he shall be indisposed on Thursday, which is a whole holiday. Among the other things that are taught him is the geography of the Missouri River, and he returns to tiffin and confounds his father who is so uninstructed as not to know the length of that imposing stream.

This imparting of remote knowledge to babies is a good old custom in education. There is no doubt that the clever child likes it. The possession of any knowledge confers prestige in the family circle; and, as the hungry man will eat any meat, so the eager mind will batten on any fact. If, in addition, a knowledge of the Missouri River will enable you to be top of your class, so that the teacher gives you a sweet, all is for the best in the best of all possible schools. The reaction of the average or stupid child is very different.

The Missouri River is nothing to him, and the senseless words depart from his mind as soon as they are uttered. The time is either wasted, or, worse, made miserable if the school demands retention of the stupid facts.

A generation ago, when this type of knowledge was taught extensively in Infants' Schools the children were "kept in," and punished continually because they could not remember what they were taught, and both teachers' and children's life was made a burden by the unsuitable subject matter.

Formerly the great medium of this instruction was the object lesson. In the old log books of Elementary Schools are references to these lessons which were the star performances of teachers, and the tests of those in training. The Maria Gott of these notes was a pupil teacher in 1876.

"May 19th. Maria Gott gave a lesson this afternoon on 'spiders.' Her manner is too persuasive for a gallery lesson requiring more life and energy."

"September 8th. Maria Gott gave a very creditable object lesson upon the 'Racehorse' yesterday afternoon. She appears to be improving at every lesson."

"October 13th. Maria Gott gave a very fair lesson on 'Pins'. Several out of the Infants' Class advanced to monosyllables during this week."

"October 27th. Maria Gott's lesson on the 'Tails of Animals' did her great credit generally, but she might have enlarged more with the subject."

This last lesson—on the "Tails of Animals" was a favourite for thirty years. The following is a version published in 1900 which does not differ materially

from that on which Maria Gott failed to enlarge. She cannot have had the live dog.

## CHATTY OBJECT LESSONS IN NATURE KNOWLEDGE

ST. I.<sup>1</sup>*Tails and their Uses.*

Objects—A Live Dog. Prepared Tail Bones (as of Cow); Brushes of Fox and Squirrel: Pictures of the various animals whose tails are dealt with.

MATTER.	GENERAL METHOD.	DETAILED HINTS AND SUGGESTIONS.
STAGE I.		
Examination of tails.		
(1) Few animals seem to be without tails	Observation	(1) <i>Mention</i> the guinea pig as a tail-less animal.
(2) Some tails are thick, warm bushy fur.	"	(2) <i>Show</i> brushes of fox and squirrel and picture of collie dog.
(3) Some are bunches of coarse hair.	"	(3) <i>Show</i> picture of horse, exhibit some horsehair.
(4) Some tails are bony and strong.	"	(4) <i>Show</i> picture of cow, and exhibit prepared tail-bones; also picture of kangaroo.
(5) Some tails are thick and fleshy.	"	(5) Rats and mice (long) and <i>contrast</i> with tail of pig (short and curly).
(6) Some are covered with long hair all the way along, and some are only tufted at the end.	"	(6) <i>Show</i> pictures of cat and lion and contrast their tails.
(7) Some tails can grasp.	"	(7) <i>Show</i> pictures of monkey and harvest mouse.
(8) Some tails are very short.	"	(8) <i>Show</i> pictures of deer and rabbit.

<sup>1</sup> Longman's, 1900.

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MATTER.	GENERAL METHOD.	DETAILED HINTS AND SUGGESTIONS.
(9) The tails of dogs vary much in size and shape, but all turn up a little at the tip.	Observation	(9) Show pictures of dogs and contrast tails of collie and greyhound. Induce the living dog to wag his tail in pleasure by patting or feeding him.
STAGE II. Questioning on fore-going examination.		
(1) It is exceptional for an animal to be tail-less.	Questioning.	(1) Tell me the names of animals which have tails. Now tell the names of as many which have no tails. (By the attempted enumeration of the latter prove how exceptional they are.)
(2) The tails of animals vary in size, in shape, and in texture.		Name an animal with a tail of warm bushy fur (squirrel), covered all along with fur (cat), of bunched coarse hair (horse), long and tufted end (donkey), bony, which can hold or grasp (monkey), thin and fleshy (rat), very short (hare, stag). What kind of tails have dogs? (All shapes and sizes). What did the dog do with its tail to show it was pleased? (Wagged it.)
	Memory.	What does a cat sometimes do with her tail to show she is angry? (Lashes it.)
STAGE III. Tails and their use.		
(1) Tails are sometimes used to express feeling.	Questioning.	(1) How could you tell if I was pleased? (Smile—by the face). How did the dog show pleasure? (By wag of the tail.)

MATTER.	GENERAL METHOD.	DETAILED HINTS AND SUGGESTIONS.
(2) Tails are sometimes used as fly-flippers.		(2) If a horse or cow is troubled by the flies in the summer, how does it attempt to get rid of its tormentors? (Flicking the tail.)
(3) Tails are sometimes used as wrappers for warmth.		(3) When a cat lies down to sleep, where does she put her tail? (Curls it round her.)
(4) Tails are sometimes used as rudders.		(4) How is a boat or ship made to turn? (By a rudder.) With what do fishes turn themselves, as with rudders? (Their tails.) Suppose a land animal takes to the water regularly, as a water rat does, what do you think it uses to steer through the water? (Its tail.)
	Telling.	<i>Mention</i> the flying squirrels, which jump long distances through the air, and use their big tails to steer with.
(5) The kangaroo uses its tail as an extra leg.	„	<i>Exhibit</i> a picture of a kangaroo sitting up or springing with the help of its powerful tail. Rats also spring with the aid of their tail.
(6) A few animals have prehensile (taking hold) tails and use them as hands.	„	(6) <i>Tell</i> how some tails seem to have the sense of touch how they are very flexible (easily bent). Instance the strong muscular tail of the monkey with which it clasps and hangs its whole weight upon for hours at a time.

## 210 EDUCATION OF CHILDREN UNDER SEVEN

MATTER.	GENERAL METHOD.	DETAILED HINTS AND SUGGESTIONS.
(7) Tails assist in the classification of monkeys.	Telling.	(7) <i>Point out</i> the importance of tails when they assist in the classification of monkeys; those without tails being called apes, and those with short, insignificant tails being called baboons.
STAGE IV.		
Conclusion.		
(1) All animals which have well-developed (well-grown) tails seem to have a particular use for them.	„	(1) <i>Let</i> the class name an animal with a tail, and state the use of it. This will serve as a recapitulatory exercise.
(2) Those animals which are tail-less seem to be so because they have no special need of tails.	„	(2) <i>Show</i> that the elephant and pig have very thick skins, and that flies are not able to penetrate them, and therefore the tails of these animals are insignificant. Similarly the sheep is protected from flies by the thickness of the wool.

When we remember that this farrago of irrelevances, cross divisions, and muddled thought was literally beaten into the children,—Maria Gott is censured for a want of “severity,”—we can realise something of the force of the reaction against this mode of teaching.

Yet remnants of it still exist today. The object lesson in its latter days became the means of teaching all the subjects other than the three R's. *Object lessons in Botany* is a course in that subject dealing thoroughly with the different aspects of the subject and *Object lessons in Geography* is a course of physical geography.

The fundamental defects of the object lesson were two. The lessons were not generally planned to make a systematic course of instruction, but jumped, as did Maria Gott's, from one subject to another, and secondly, they were quite unrelated to the life and experience of the children, and the information conveyed was generally of little intrinsic worth.

There are subjects today—especially poetry and Nature study, in which teachers frequently make the former mistake, though nothing in the subject matter compels it, but only lack of forethought and organising power. The second matter is more complicated.

Mere knowledge in itself has a certain value, and there is a type of mind that enjoys acquiring it for its own sake. The great majority of mankind do not feel this urge towards information, and when they are made to learn it, forget it at the first possible moment. Yet to know nothing is to be helpless.

There are two divisions to be borne in mind. Some knowledge is useful, or appears to us to be useful, and some does not ; secondly some knowledge is conveyed practically through contact with things, other knowledge is only a matter of words. These distinctions are not sharp, nor are they true of the same matter for different people. No one can tell for certain what will appear useful to another mind, and the most curious scrap of information may fulfil some purpose. We can only guess roughly in education as elsewhere, and the teacher who is most in touch with her class will guess best. A teacher with a class of five year old slum children had some oak twigs growing in a jar of water. When she took them up to show to the children, the object

she selected for comment were two galls. At that moment a mouse ran across the back of the classroom. It was interesting to see the complete change of attitude. Oak galls, never a very thrilling subject of contemplation, left her babies in the stillness of complete apathy, the mouse galvanised them into a chattering crowd, bursting with excitement and interest. Any actual information which is taught to small children should be along the lines of their interests and purposes.

Further it should be concrete and practical. The lesson on the tails of animals was supposed to be illustrated, in addition to all else, by drawings of tails. These were to be represented in outline with their places of attachment, so that the creatures were the exact reverse of the Cherubs that Charles Lamb comments on in his Essays. Such illustrations convey little to the childish mind. They are a puzzle to the adult; and even when illustrations are good, they are only interesting if made the basis of activity. Children want to talk about the pictures they see, to think about the people in them; even, if the pictures are simple, to try to copy them. The mere showing of a picture has little merit, and the apathetic behaviour of a class when a picture is merely *shown* to them proves it. The same class are full of life and vigour when questioned, or led to comment on the picture.

If a teacher wants to impart general knowledge it should come in a simple and obvious way. If she intends to teach them about animals the school needs pets; if fishes, an aquarium; if the germination of seeds, a garden. There is every reason for adding to the



knowledge children have got already from experience, but to drag in the totally unknown at any age merely in order to talk about it is a mistake.

At the same time children are eager for knowledge about the world around them. From five years old or earlier children will begin to ask questions such as "How do telegrams go along the wires?" "What are clouds?" "Where do babies come from?" "How does it rain?" and, if they have received formal religious instruction, "Where is God?"

M. Piaget has shown that children will invent for themselves theories about such things as the origin of the sun and moon, stones, trees, etc. Most of these explanations are of course quite wrong, many are muddled, but they do indicate real thought, and that the child has turned the matter over in his mind. The following is an ingenious blend of observation, animism and the memory of a picture in which Christ wears a bright halo. The child was 8½.

"Q. Does the sun know when the weather is fine?"

Yes, because it can see it.

Q. Has it eyes?

Of course! When it gets up it looks to see if it is bad weather, if it is, it goes off somewhere else where it's fine.

Q. Does it know that it's called the sun?

Yes, it knows that we like it. It is very nice of it to make us warm.

Q. Does it know its name?

I don't know. But sometimes it must hear us talking and then it will hear names and it will know.

Q. How did the sun start?

It was made in Heaven. It was a person who died and then went to Heaven. In Sunday School he is called God.

Q. Where did this person come from ?

From inside the earth.

Q. Where from ?

I don't know how he was made.

Q. How did he make the sun ?

The person was very red and that made the light. Even in the morning, before the sun is out, it is light all the same."<sup>1</sup>

Other children had a theory that the sun was a fire kindled with a match.

It is not uncommon for a child of only five to plunge into the depths of metaphysics.

Child. Daddy, is all that really here ?

Father. What do you mean by all that ?

C. All these things. Can I really see them all ?

F. You can see them and feel them. They are always there.

C. No, they are not always there. When I turn away from them they are not always there.

F. When you turn back they are always in the same place.

C. They are all alive. They are always moving and going away. When I come close to them they come close to me.

F. But aren't they always in the same place ?

C. No. I only dream them and they come into my dream and go out of it again.

Then the child walked slowly about the room

<sup>1</sup> *The Child's Conception of the World.* p. 270.

touching the things and saying, "Look at them coming and going away again."<sup>1</sup>

The child in an educated home is both encouraged to ask questions about these matters and is given answers that bear some relation to the truth. Often he is told that no one really knows. The author remembers being very puzzled by the facts of muscular co-ordination and asking "Why, when I look at a thing can I put out my hand and touch it exactly?" The answer, probably the most stimulating one that could have been given was "Probably no one knows. If he did know he would be a very wise man."

Apart from these questions to which there are no answers, many natural phenomena involve facts which are very hard of explanation, and the adult gives an account which can hardly be understood. For example, how explain to five years old the transmission of a telegram? But because a thing is difficult it is no reason for shirking it, and teachers should do their best to stimulate curiosity and also to satisfy it. Unfortunately school is the last place in which many children think of asking questions on topics of general interest, and this kind of knowledge is unsuitable to small children unless it is asked for.

Modern salvation is believed to lie through hand-work. The cave man becomes comprehensible and valuable so soon as you have modelled a flint implement in wax, or constructed a cave, after the pattern of that given to a menagerie lion, in torn paper. There is every reason to think that the impression left on the child's mind is completely inaccurate, and also

<sup>1</sup> ib. p. 243.

that his powers of imagination are so weak that he imparts into the cave the problems of suburbia. A small girl asked to give the kind of remark one cave woman would make to another, replied : " Yes, dear, I'll come to you on Wednesday. That's the maid's night out."

This enthusiasm for cave men is probably due to various causes. In the first place it is far less trouble to talk about cave men in a class room than it is to take a set of children out to see a steam roller working on the road. Secondly it is much safer. Some one, an inspector perhaps, might come along and consider the steam roller a waste of time. The teacher is certainly working over the cave men. Then there is ignorance. Many of us find modern civilisation so difficult to understand that pre-history appears delightfully simple. And lastly, there is theory. A child is supposed to recapitulate the history of the race in his development ; therefore clearly he should recapitulate its history in his knowledge.

Teachers have decided that at 6+ he is in the cave man stage, and so what else should he do in school but learn about his forebears. The whole theory, when applied in this manner, is a tissue of absurdities. A child is a product of his age and at 3 years old knows all about motor-cars, telephones, aeroplanes and elevators. He is interested in the things and at home with them. He is in no way like a cave man : nor was a cave man like him. Had the inhabitants of Cromagnon been as underdeveloped as a child, as ignorant, as lacking in foresight they would have perished in a year without posterity.

If the school wishes to impart general information to its children it can do so best through the medium of a game ; and this is the place of the project. Here the children are not only active, but their knowledge is kept close to actuality—Croydon aerodrome, if one lives near, is both more miraculous and more true than the jejune fantasies of the late stone age. If the school does not give the reality it gives something which is reasonably similar.

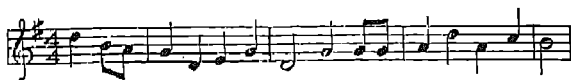
Nothing of course can quite take the place of direct experience, but in many cases the environment of the home and school are so poor, it is so much a case of what the Germans call *Asphaltekultur* that teachers cannot provide the reality. The solution of this problem of general knowledge lies in methods which it is the aim of this book to urge. Open up the Infants' Schools. Let them have light, air and an environment which by grass, earth, flowers and pets is fit for children to grow up in, and which provides them with objects of natural and immediate interest.

### EXERCISES

- 1.—What general knowledge do you think it desirable to impart to a child aged six ?
- 2.—Give examples of children's questions. State the age at which they are asked, and say how you would answer them.
- 3.—Indicate what pets you would keep in school. Discuss their housing, care and the use you would make of them.
- 4.—Indicate what knowledge you would impart in connection with (a) gardening, (b) birds, and what methods you would use.

## CHAPTER XIV

### MORAL TRAINING



THE question of moral training can be discussed apart from that of religion, and this without in any way prejudging the importance of the latter. The principles of lay morals and religion are similar: the great difference between them is the sanctions involved. Lay morals say frankly, "How can I so live as to cause the greatest pleasantness to those about me?" Religion brings in the additional concept of man's relation to God. The idea of God is one of great importance and wonder. It is one which the united thought of mankind for centuries has failed to make clear, simply because it involves elements which by definition transcend man's imagination. The mystic passes beyond ordinary experience and beyond language, and thus his vision is essentially incommunicable. The average man believes in his God, but is lamentably unable to make His attributes reasonable to the enquiring child. The Omnipresence of God, for example, can lead to absurd questions and answers, not because the concept is in any way absurd, but because it cannot be translated into terms that the child can understand.

On the other hand the child can and does understand his relation to his neighbours, and it is usually in terms of family or social relations that the idea of God is explained to a child, as the Father, the Friend, the Guide.

A child appreciates, by a primitive sympathy, the emotions of those with whom he comes into close contact, and he wishes them to share his feelings and sympathise with his purposes. He can also see the direct effects of his actions on those about him, and recognise the effects of their actions in himself. If a child is well brought up he will have learnt, long before he is five, to consider the happiness of his immediate family, his little friends and his pets.

If one travels in different countries nothing is more noticeable than the degrees of friendliness which seem to exist in personal relations. In some lands the traveller is met by a rapacious hostility, generally coupled with an irritable excitability that is trying in the extreme. On the other hand other countries appear to be inhabited by people who are kind to each other, expect nothing but good of their fellow men, and attribute to the stranger the virtues of orderliness, amiability and courtesy which they themselves show. Every part of life is soothed and made pleasant by this atmosphere: officials are not offensive, casual acquaintances show their most charming characteristics.

It is this general consideration and benevolence felt in himself and expected in others, that one desires to cultivate in the small child, and indeed few things are more remarkable than the way in which unruly,

cantankerous children settle down and become obedient and friendly in a few weeks after they have entered a good Nursery or Babies' Class.

Among the means by which this change is wrought in the newcomer so that he is made one with the spirit of the class, none is more powerful than suggestion, coming both from the teacher and the class. Just as "it is not so much *behaving* like a lady as being *treated* like one"<sup>1</sup> that makes a girl ladylike, so it is largely being regarded and treated as a well-meaning and reasonable person that develops in the child these qualities.

Thus a well-managed class exerts a strong influence on the newcomer. He sees how the other children behave, he imitates, he sympathises, and it is difficult for the normal child to maintain a continuous adverse self-assertion against the organised feeling of class and teacher. In cases where children continue to resist the influence of the class and teacher, there is generally found to be some repressive or challenging element in the conduct of the teacher or the other children. If a child is repeatedly thwarted, or snubbed, or forbidden to do what he wants to do—or if he is neglected and made to feel inferior, he may take the line of asserting himself at all costs, however much pain he may cause to himself or to others: and this leads one to realise that the benevolent friendliness which it is so easy to speak of, is not achieved without a great deal of thought and patience on the teacher's part, and thought and effort on the part of the child.

It is important to achieve it, not merely for the sake

<sup>1</sup> G. B. Shaw, *Pygmalion*.



of the happiness of the class and school generally, but because during these years a child is building up, not only habits, but also a general idea or ideal of himself, and the qualities of this ideal may influence him throughout his life. How conscious or unconscious this idea is may be left for psychologists to decide. What is clear to the ordinary person is that quite early in life we feel ourselves to be acceptable, lovable, wanted—or we feel awkward, resentful, defensive, hostile. Sometimes the same children show one or the other attitude in response to different situations or people. But we want to make the desirable one dominant by giving it all the encouragement we can; so that the children may grow up feeling that friendliness is normal and roughness and selfishness abnormal. It has been pointed out often<sup>1</sup> that a person's happiness depends very largely on that sense of security which comes from having many bridges between his "lone self" and the world, and few things hinder the making of these bridges more than an unfortunate attitude to one's fellows, or any idea of oneself as a person "apart" from or "agin" the rest of the community.

How, then, can we arrange the children's lives so that they are able easily to develop and practise that kind of behaviour which will lead to the establishment of a happy disposition both in individuals and the class generally?

First, the children must be occupied. A small healthy child resents having to sit still with nothing to do. And it is good that he should resent it. One

<sup>1</sup> Especially in Adler, *Problems of Conduct*.

sometimes wonders how guilty the schools are in the matter of this decay of resentment against idleness. It is not true that the average man serves best by "standing and waiting". It is right that children should from the beginning feel uncomfortable about sheer wasted time. This, of course, is neither to say that children are necessarily inactive because we cannot see them doing anything, or anything which we consider useful. Nor is it to suggest that somebody has always to be amusing them. Of that more will be said later, concerning play.

In the past there were dreadful periods in life when one was washed and dressed up and then must sit and wait while parents or nurses put on their Sunday hats or party frocks to take one out. Those periods, submitted to for the sake of the end in view were, for many children, times of horror, because of the inaction. They were probably only five minutes long, yet in retrospect they occupy ages.

The good teacher must be ingenious in finding activities which are not only in sum inexhaustible, but which are also delightful to the individual children engaged in them, and also not a nuisance to others not so engaged. This condition at once imposes severe limitations. What a child may do in a nursery with one or two other children, he may not do in a school class with forty-nine others. But if numbers impose limits, they also offer some opportunities. A child may not be able to run round and round the room just when he likes, dragging a rattling waggon; he will have to observe more times and seasons than he would at home;—but he will be able to enjoy singing

games and group games which are much less possible with very small numbers. Further, the increased enjoyment which many children, even those from amusing homes, show when they go to school, indicates, perhaps, that they find additional interest in the discipline that numbers automatically impose on their activities :—" Me this unchartered freedom tires ! "

Besides suggestion and occupation, the teacher can also rely on a certain reasonableness in most children. In the old days it was thought that children's behaviour must be after a rigid pattern because, it was said, if he were allowed to do a thing in one time and place, he would never realise that he might not do it at other times and in other places. This is not true. Even young children show an almost dog-like capacity for " understanding " situations, and nearly all are able to appreciate differences of time and place if someone explains and does not merely coerce. John, when three, used sometimes to be taken out by his grandmother. She regularly started the walk by saying, " Now John, I want you to hold my hand, because I am old, and if you run away I can't run after you." His conduct, thus adjured, was always exemplary. Moreover, he appeared to take a certain pride in understanding the situation and in his responsibility, and he frequently referred to it and repeated his grandmother's words—" I mustn't run away, must I ? You couldn't catch me."

To appeal to this reasonableness and to the child's pride and pleasure in acting in a consciously responsible way, however crudely, is perhaps the most valuable

way of dealing with anti-social behaviour. Most of the acts which are forbidden in schools are neither morally wrong nor sinful, and to treat them as such is to confuse issues. Moreover, it is more important for a child to realise that his actions have to be fitted to time and seasons, than for him to learn to obey a rigid incomprehensible law which is certain, sooner or later, to provoke reaction. If a teacher is clear in her own mind as to why she is discouraging or forbidding certain activities, she can generally get the children to see her point of view sufficiently for them to agree with her. And then, more than half the battle is won. There will be lapses due to lack of self-control, ignorance, or even deliberate desire to annoy ; but these instances are generally isolated cases, and can be dealt with each according to its quality.

In as far as we appeal to the reasonableness of children we must remember the force of our own examples. If a teacher shouts in the classroom but forbids the children to do so, she is making the situation more complex for them than is necessary.

Some anti-social acts have their own direct consequences which are quite obvious as such to the child. Sometimes these consequences may be allowed to work their own way. If one child knocks down another's tower of bricks he may be attacked, or at least looked at with hostility, by the sufferer. It may be then the teacher's part to moderate this expression of natural hostility. Sometimes the child who has suffered snatches up a weapon to aid his vengeance. This is dangerous, but if the act of knocking down the tower was deliberate and the builder attacks with his

bare hands, the teacher may well let the battle have its course. If the child knocked down the tower by accident the teacher must interpose to settle the quarrel amicably, and some explanation which both children can understand should be given. A child who persistently interrupts a game might well be made to stand aside for a time, and one who sulks left to his own bad temper.

These consequences are not arbitrary school devices but are of the pattern of actual life. If a man cheats at croquet he is barred from the local tournament, a bad tempered bridge player finds it hard to get up a four.

Lastly, one of the most effective ways of making the paths of virtue broad enough for the child to keep his way therein is by giving him the knowledge and skill which he needs to deal with situations that tempt him. We forbid a child to do many things not because they are wrong, but because they are risky for him, though not for us.

In the last century it was always assumed that children left alone would certainly "get into mischief." They might play with the matches and burn down the house; climb trees and tear their clothes, ride on the swing and break their backs. These disasters probably did not happen as frequently in real life as they did in fiction. Today they happen less often still, since children are both better informed and have been taught and allowed to practise the use of their bodies. Matches, for example, possess less attraction than they did for children, because they are no longer a mystery. A mother keeps them out of the reach of a

baby lest he suck them, but a child slightly older is allowed to strike them and light the gas, under supervision. By the time a child is five he can be safely trusted to use matches for legitimate purposes, because he has acquired the necessary manual skill ; and he can also be trusted to leave them alone, because he is no longer curious about them, nor does he regard their use as a symbol of adult power and importance. Thus in other fields. Children climb trees with a high degree of safety, and with very little damage to their clothes. They swing without breaking their necks, and their skill in balance enables them to walk along the tops of walls or over the rails of bridges without disaster. These activities are all desirable if they are not dangerous. At Oxford, a city surrounded on three sides by rivers, it is the custom to teach the children to swim when they are seven or eight years old. Some learn younger. The reason is that it is impossible to prevent children from playing on the river banks or with boats, and it is only by teaching them to swim that fatalities can be avoided.

The most valuable part, in some ways, of the Nursery School and baby class training is that it gives the children opportunities to obtain the skill necessary if they are to be free of their environment. Children love washing up ; and they are taught to do it without getting wet. They carry jugs of water and mugs of hot milk. They learn how to climb on to the rocking horse. They put up their folding beds, and run as hard as they can around the playground. Unless the children were allowed to acquire the necessary skill, all these activities would

have to be classed as "wrong" for the child. In some homes they would still be thought "dangerous".

The more skilful a child becomes the less reason will there be to forbid activities which he finds pleasurable and which provide him with valuable experience.

Again, many children's errors can be classed under the heading of mistakes. One is often irritated by a child's action that is entirely innocent and due to one's own carelessness. A well meaning aunt, wishing to help a very small nephew propel his paper boat in the bath, gave him an old tooth brush to use as a stick. The baby proceeded to "clean his teeth" with it, and reappeared sucking the dirty object. The act was the result of a perfectly good association of ideas, and the adult was to blame for not anticipating the action: but at the moment, disturbed by fears for the child's well-being and forced to wash out his mouth and so forth, she felt sorely tempted to be angry with him. Incidents of the same sort occur when a small child drops things, walks on the flower beds, fails to realise that muddy boots are not good for carpets, and so on. There is no malice, only an error.

Sometimes the matter goes further. A child thinks of something to please you and, the circumstances having changed, you do not want the act. You may have been delighted to see and fondle his puppy in the garden but, busily sewing a summer frock, you may find it difficult to keep your temper if the same puppy is deposited on your lap, however lovingly, for your delight.

Yet none of these situations should provoke rebuke. In most cases it is sufficient to point out that the thing has gone wrong.

It is different when a child sets himself up to defy his environment. A little child does this seldom, but even a baby a few months old does it now and then. The commonest form with the very young child is screaming when left alone for the night. Generally, after his wails have been ignored for a fortnight—and a very trying fortnight it is—he gives it up and sleeps quietly. At a slightly later stage a child may attempt to bend his environment to his will by violent fits of anger at meals. Usually, if he be carried into another room and left to scream alone this mode of action will also be abandoned as unsatisfactory—and so forth. Very often, a child who has thus “demonstrated” will be quite good-humoured five minutes afterwards. At the same time, the power which the adult possesses over him should never be used tyrannically. As has been said, if a child repeatedly feels it necessary to assert himself in violent ways against his environment, the environment is more likely to be wrong than is the child. Also, it must be remembered that even little children have very definite ideas of what they want and, especially in spheres where this is easily possible, they should be allowed to carry out their wishes.

One girl of two years was given a big model stable with horses, etc., to play with. The obvious place for the toy was the floor, but for some reason she preferred it on a chair. Her mother suggested the floor, but she refused the suggestion. During her



absence from the room the toy was moved down, but she at once asked for it to be put back, and there it remained. As the toy was for the child's amusement, and as it served her purpose better on a chair, the child had reason on her side, whatever her mother might think about superior convenience. This kind of consideration is claimed by adults as a right; it should be accorded also to children in matters in which they have power to judge.

On some occasions a child is disobedient, not out of defiance to the environment, but because of an impulse that he does not know how to resist. A child of five sent to bed in June at 7 o'clock is reft from an interesting world when he is not yet conscious of fatigue. He is tucked up in bed, kissed and blessed, and told to be a good boy and go to sleep. Ten minutes later he is up playing with his toy aeroplane. It is hard to regard such acts with any great degree of severity. At the same time they must be discouraged, for the child's own sake; and considerable tact is required on the adult's part to obtain obedience without producing fear, friction or unpleasantness.

Punishments, that is specifically devised deterrents, clearly play a very small part in the training of a young child. Few of his acts are done from a bad motive, and many of these few carry natural social consequences which are quite sufficient to deter the child from repeating them. And, as has been shown, the greater number of his unsatisfactory actions can be reformed by greater knowledge and experience.

## STORIES

The moral education of the past depended very largely on stories as engines of instruction ; and still, to-day, the story is assumed to be an important part of training. This is only true after a certain age. The child of three or four years is not ready for stories and cannot understand any but the simplest. He learns by imitation, from his orderly surroundings, and from direct comment and precept.

He has learnt by these methods, for example, how cats ought to be treated. The defect of his knowledge is that it is not general. Cats he knows and respects : frogs, perhaps, he is less well acquainted with and is more likely to treat as natural curiosity suggests. The extension of experience takes place in part through stories. As in Euclid the demonstration of the qualities of one triangle is supposed to hold good for all other similar ones, so, in the story, the horse or the rabbit, though individualised for literary purposes, are beings whose common characteristics supply interest to other beings of the same race. The simple animal story brings about an extension of a child's sphere of interest and sympathy, and hence influences his conduct.

It also, in all probability, renders more definite his moral concepts. Rabbits as well as little boys are "naughty", disobey their parents and get into trouble. Horses are "kind" or dogs "brave". By this transference to the animal world situations are universalised and ideas classified.

But the real place of stories comes later. Professor McDougall in *Social Psychology* discusses the stages in the development of the will in relation to the sanctions of action. These stages are also the stages of morals. At first there is the crude control of impulses by fear. Then there is the consideration of material rewards and punishments, then the vaguer sanctions of men's opinion and lastly the approval or disapproval of the formed moral sentiment of the individual.

Now stories may be arranged to follow this progression. In fairy stories good is rewarded or evil punished with a pleasant regularity. The virtues of courtesy, courage and endurance are the most often rewarded, though intelligence comes in for a fair share of the successes. Pride, stupidity, cruelty and rudeness have their fitting overthrow.

We may well ask, then, why the "moral stories" of a century or so ago, with their complete outfit of nicely adjusted rewards and punishments, apparently failed in their purpose of teaching morals? In these the "poetic justice" of the realm of fairy was brought to dwell in the home. The virtuous were no longer seventh sons of seventh sons, but poor children living in the next street;—little girls who at the age of six and realising the family's poverty went out to sell flowers, and got adopted by wealthy old gentlemen. The vicious were the disobedient children who played with matches, or ate little bits of string and came thus to a bad end. Such were the tales of which *The Fairchild Family* is the most solemn example and which the histories of Augustus and Matilda bring to contemptuous parody. A child of to-day will accept

the legitimate fairy story and enjoy it ; but will soon tire of or distrust the specious moral tale.

The reason for children's power of discrimination and choice may lie deep in the psychological history of man. Some fairy stories are world-wide and older than our history books can tell. Who knows what age-old dreams are not there preserved ?

" Very old are we men ;  
Our dreams are tales  
Told in dim Eden  
By Eve's nightingales."

The minds of children naturally respond to what has such close connection with primitive development.

But, apart from this, the moral story may fail of its effect where the fairy story succeeds, because the fairy story makes no pretence to represent the world as the children know it in concrete experience. The characters act in ways which the child can understand and sympathise with, and the events have a certain logic and convention of their own which children quickly get to know. Despite the question, " Is it true ? ", it is doubtful whether children's appreciation is affected by their realisation that the world of Jack and the Beanstalk is different from their own, and it is also probable that children do not regard this world as exactly true or false or are even concerned with those categories. In its own way it has a reality at least equal to that of the world about them, but yet it is a different world, and they do not expect the two to mix. But the moral story claimed the reality of the child's actual world and the very unnaturalness of the

would-be natural actions and situations made the stories stupid and unconvincing.

Moreover, moral stories lacked the dramatic sense of fairy stories, and could seldom identify themselves with the desires of the children who heard them. Nobody wants to go about looking for pins to pick up, even though fortune may result. But who would not delight to take a cow to market, or long to go to a ball in glass slippers and a gold coach, or outwit the wolf and catch him in a pot and make fine soup of him?

And it frequently happened that if the moral story did portray desires such as children might feel, it was only to show how wrong and disastrous in consequence those desires were.

It must be further acknowledged, too, that the favourite fairy stories have, by generations of siftings and experiments, become very good stories dramatically. The boring parts have been dropped, the arresting parts developed. Like the old ballads, they still survive because they *have* survived by virtue of their power, where thousands of worse tales have perished. And the genuine fairy story is quite inimitable.

The child's standards of conduct, then, are affected by fairy stories in a vague and general way. There is no question of his going out to act in the identical manner of the prince or princess because his conditions of life are clearly totally different, yet for all that, the implications for general conduct remain in his mind and have a certain effect.

This effect is chiefly wrought by the reinforcement,

although in a different setting, of the social sanctions that he is becoming aware of in his own life.

This is not to suggest for a moment that little children draw these general conclusions definitely, or even consciously; still less that they are aware of abstract virtues and vices. In fact it is noticeable that they rarely use the abstract substantive for moral qualities until they are nine or ten. They prefer the adjective applied to a person or a definite act—"Was he a brave man?" "They were unkind to their poor little sister."

But these half-realised attitudes of mind, given force by sentiment and ease of action by habit, are the surest bases for conduct to build on. The common intercourse and acts of daily life do not call for moral and philosophic judgments. They are carried out in the spirit or at the dictates of a more or less settled and unconscious "set" of character—and the foundations of this begin to be laid from the moment the child first acts.

The stage after the fairy story is that of the story which represents a standard of behaviour and an ideal accepted by one's fellows. These stories are numerous and the ideals they represent various. There are the ideals of mediæval chivalry, the soldier's ideal of duty and courage, stories of bravery, self-sacrifice, long suffering. All are not suitable for every age. This is especially true of those of self-sacrifice and abnegation. The child of five, six or seven is not at the right age for these virtues. He is too small and weak to be able to do much for others; his own needs in the paths of learning and growth are too urgent

for it to be healthy for him to stand completely aside. It does the adult, whose knowledge is wide and whose physical strength is assured, no harm to suffer a certain degree of hardship or to give up certain experiences ; a little child needs all he can get, and his greed and his eagerness are the pledges of his healthy development.

But courage is within a child's ken. The control of fear is one of the problems of childhood, and stories which represent people as overcoming the dread of the dark, of loneliness, of adventuring out in a boat to save others, or riding at night to carry news, are welcome and helpful. Again at nine or ten a boy begins to feel his growing strength and, if left unguided, may display it in acts of roughness and insubordination. The ideals of chivalry contained in such stories as the *Morte D'Arthur* have an obvious place. It is to the adolescent that self-sacrifice and martyrdom make the most obvious appeal. Not only is the youth forming his own standards of conduct, but the glorious publicity of martyrdom appeals to his impulses of self-display.

### EXERCISES

- 1.—Relate any incidents from your own childhood in which you felt you had been unjustly treated.
- 2.—Why do you think little children tell lies ? What kind of lies would you not be surprised to find told by very poor children ?
- 3.—How would you tackle the problem of dealing with children who lied ?

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- 4.—Have you in your experience come across cases of children behaving cruelly? Can you account for this behaviour? How would you attempt to alter it?
- 5.—Consider what "natural impulses" a child has to suppress or severely control when he becomes a member of a class of fifty children even in a good Infants' School.
- 6.—Describe carefully what qualities of character you would hope to find in a well-brought-up child of seven.

### BOOKS

C. Burt	<i>The Young Delinquent.</i>
A. Adler	<i>Problems of Conduct.</i>



## CHAPTER XV

### PLAY



WE have already said that to make virtuous conduct easy and habitual for children we must give them scope for their activity; that is, means of being occupied. Much of this activity is in recent books called "Play," and elaborate theories have been evolved to distinguish it from work and also to show its place and purpose in the life of the young child.

For an explanation of the growth of the theories used to justify eminently commonsense practice, we must turn to history.

When theories of play were first mooted, it was, and had been for many years, the custom in well-to-do families to keep children working at their "tasks"—sewing, reading, music, etc.—for almost the whole of their working day; while the children of the poor, from five years old and upward, were kept in coal mines and cotton mills for twelve hours a day. It was only to be expected that the well-to-do children filled their brief periods of freedom with dangerous escapades and "mischief," since they had scant opportunity either for developing any purposes of their own to work out or for acquiring those skills which we have seen are the safeguard of children's normal healthy

activity. Their leisure hours were the easy prey of whatever devil it was that lay in wait for children's "idle" hands. To-day we extend the term play to mean much more than this rather wild reaction from enforced tasks, a reaction to which we give a more vulgar but truer name—"letting off steam."

The children of the poor on the contrary fell into a heavy sleep of exhaustion as soon as they were released from their toils. They could not play. They had neither the energy nor the knowledge of how to do it. A brief but telling picture of their conditions is given in Charles Lamb's essay, "Homes which are no homes."

It is easy to see, then, how the idea arose of play as "the release of surplus energy"; and how it therefore became suspect as being a less worthy if not altogether unworthy way of spending one's time.

In recent times, we not only tolerate play but regard it as the most suitable form of activity for all young children, or, to put it more clearly, we think that whatever activities we provide for or suggest to children should be undertaken by them in the spirit of play—"free play" as some would say.

The feeling that this attitude must be justified, together with the persistence of the unhappy distinction between play and work has given rise to the assertion that play is "an instinct," something "natural," a "preparation" for life prompted by some rather mysterious and innate urge—or that it is a "recapitulation" in the child of the history of the race.

Though all of these theories may suggest useful points of view, and may find support in some of the

observed characteristics of children's play, it is probable that the explanation of it, as well as its justification, lies in the simple fact that it is the nature of a healthy human being to be active, and he must be doing something. He may be sitting and thinking or sitting and dreaming—both very real activities; but if he indulges much in "just sitting" there is something abnormal about him.

What a person does depends to a large extent on age, capabilities and position. All kinds of factors operate: economic necessity, the pressure of society, training, intellect. It is hard to take any case that is typical. Those that are exempt from economic necessity usually fall under a social régime which provides them with continuous activity. If a man has £600 a year and lives in the country he joins the "huntin', shootin' and fishin'" classes and passes his life in activities so hedged round by custom and so regular and exacting as to look very like work. An excellent picture of the mingled pleasantness and futility of this way of life can be found in Siegfried Sassoon's *Memoirs of a Fox-Hunting Man*. It is interesting to notice that this life of social uselessness and egotism was prepared for by as careful and prolonged a training as is required for any other more productive way of life. Another man, of different intellectual abilities and in a different social setting but just as independent of economic considerations, becomes a scientist, another becomes a man about town or an artist. The activities of men free from pressure are very varied, but there are forms of activity which no man takes up unless forced. Men of private

means do not become "hands" in a mass production factory, hewers in a coal mine or clerks in an insurance office. These jobs are done by people who are forced to spend part of their time and activity in tasks for which society will pay them. Men in this position therefore divide play from work—i.e. activity which they embark on because they like it, and that which they do because society pays for it. The clerk may be an organist in the evening and on Sunday and, though he draws pay for this, it is activity of his own choosing and the pay is a secondary matter. Others dig their gardens, amuse the baby, play golf, bridge or chess or listen to the wireless. Their activities depend on their intellectual abilities, their impulses and their training.

This digression may make clearer the position of the child who, in this respect, is in a curious position. He is as yet practically free from economic constraint, but he is under control, is not yet in full possession of his own powers, and he is expected to do what society thinks good for him. He is constrained for his own good directly and for society's indirectly. He is expected to develop his full capacities so that later he may be happy himself and a cause of happiness to others. Now in the past it was assumed that a child did not know what was good for him, and so this constraint was made close, and a child's natural activity repressed till he, too, distinguished between work and play—that which society forced on him and that which he did of his own free will. Today, because we have more faith in the child's powers, and the desirability of his using those powers freely in circumstances

arranged for him, the constraint under which the child falls is immeasurably less than formerly, and, as in the case of the fox-hunting man, we, as well as the child himself, would be hard put to it to distinguish his "play" from his "work."

But this is not to say that the play of twentieth century children is "instinctive" or "natural," although activity may be.

It is impossible to know what the totally uninstructed child would do of his free will. "Natural" play is as hard to find among men as is any other "natural" activity. It is only the conduct of a child under about a year that can be considered as even approximately "natural." The activity of a baby before it can sit up is chiefly limb-waving, the amusements of a child of about a year have already been described, and these are, of course, already directed by the environment. The toddler adds a wide field of activity and, if given the opportunity, will devote long periods to such simple occupations as patting sand, or going from one end to the other of a patch of grass. Even this simple form of play owes something to imitation and suggestion from other people, and as the child grows and develops he welcomes hints as to the possibilities of the materials he uses, and if these hints are given in due season he will watch you with interest while you fill a bucket with sand and tip it out, and he will try to do likewise with endless experiments and varieties of the activity. He apparently enjoys a game of "roly poly," which is developed usually upon some adult's suggestion, from his own vague tumbling.

With regard to the play of older children, and the theories concerning it, it is instructive to watch the children with and without parents, amusing themselves or being amused in a park.

Fathers on a grass plot with a child regularly begin teaching him to throw, catch or hit a ball. This particular piece of skill is highly esteemed by the British public and forms the staple of male out-of-school education. This education in ball play may go to extreme lengths. One tiny boy, three years old at most, was out with his nurse in the park of a university city. He was making her bowl to him for cricket practice. He had a bat nearly as large as himself and he had evidently been coached by an expert. He took his stand, arranged his feet, settled his bat in the crease, held it perfectly straight, made his stroke, hit or missed the ball with all the confidence of a miniature Bradman. This was spontaneous activity; but the play was so far from natural that the performance was nothing short of miraculous, and must have been the result of months of patient teaching.

If a child of this age is not shown how to play and is not provided with suitable materials, he is apt to stand about in a disconsolate kind of way or take to destruction or picking plaster off the wall in a very despair of finding or inventing fruitful activity. One of the most pathetic experiences of the teachers in Nursery and Baby Classes is the inability of very poor or neglected children to play. It takes some weeks of patient encouragement and training before such children can occupy themselves happily with the toys and materials provided for them. At first they

are just fidgety, or afraid, or wantonly destructive, or so much at sea that they scamper from one thing to another without in any way realising what kind of amusement each thing may offer.

When children are seven or older they begin to join gangs, and learn from their companions many new forms of play. Hopskotch, top-spinning, and all kinds of ball-throwing and, later, those everlasting "pretend" games made immortal by Stevenson in *The Lantern Bearers*. Throughout this stage, too, a certain amount of play consists in mimicking activities of another kind. Such are the "play fights," in which animals as well as children amuse themselves.

As he grows up, these activities become more organised by the child himself or by others. Ball-play becomes cricket or football or tennis, "playing with water" gives place to doing chemical experiments; "playing with paints" to painting or photography; playing with animals may lead to breeding rabbits or mice, and we dignify such activities by the name of hobbies.

The state of children who are not taught suitable occupations is vividly brought home to one who goes sketching in, for example, a French fishing village. The swarming children of the district have nothing whatever to do, and no idea of occupation. They wander about in small gangs, the girls dragging the family toddlers after them. Each artist is greeted with a shout of delight; twelve sabots clatter over the cobbles and six children stand round the painter. The young ones sniff, spit and gaze; the older ones try to get a little satisfaction for their self-assertion

by passing rude remarks. Occasionally they adopt more irritating but equally primitive modes of annoyance. If the artist proves patient and uninteresting, and neither loses his temper nor gives away any half-used tubes of paint, the leader at last gives the word and the sabots clatter off in search of fresh diversion. Such is these children's lives, day in day out, save when their parents mercifully give them a job, or the local priest takes the boys for a day's bathing and walking. It would be impossible to find anything less like the theoretic picture of the child engaged in free spontaneous play.

Throughout life the chain of play-activities is continuous. In adult life we have political meetings, debating societies or evening classes, dances, tennis parties, boating expeditions, bathing, motor cycling or hiking, and at every stage the activity is conditioned by the circumstances of the life of the individual.

The question is, why do some activities appeal and some do not? Why does a boy devote hours of careful thought to the mechanism of the petrol engine and turn a blank mind to Latin verse? The individual differences in this matter are enormous. There is practically no field of human activity to which someone does not turn with spontaneous pleasure, and there are a large number of activities to which large sections of the community turn.

In children the same diversities can be found. A class of twelve eight-year-olds from well educated families will show an amazing diversity of tastes. One child is passionately devoted to his fiddle, another is a naturalist with a tortoise in a box outside and a



desk full of caterpillars, another combines an enthusiasm for chicken farming with astronomical speculations of a simple kind, and so on. Hardly a child is without some special taste and knowledge.

In addition to these diversities, however, there are certain interests and activities which roughly characterise certain ages, and their characteristics can be related in a vague way to the process of development. By waving its limbs, the tiny baby achieves greater skill and power over them. At five years old a child is obtaining knowledge of the world with great rapidity and is deeply interested in people, things and, above all, animals. He is also acquiring bodily skill and loves activities which help this. At nine to ten a child has control of all the large muscles, and runs, jumps, climbs, with ease and pleasure. He can use his hands for finer work—hence the pets and handwork—and so on through all the stages. Each age in its voluntary activities exploits its powers to the full, enjoying most the use of those that are newest. Activities which are not felt as according with his developing powers are rejected by the child. The value and attractiveness of activity depends on this relation between action and developing powers.

The interest in each new acquisition is the schools' opportunity. In an earlier chapter it was pointed out how a child in the nursery studies and practices each new piece of knowledge, such as talking or learning the names of colours or the concepts of distance. The child turns eagerly to the activity while it is new and is being perfected. This continues through life. A child learning to add finds the activity interesting.

The acquisition of skill in jumping, running, diving, rowing, all prove attractive. There are adults who never lose this love of learning. Most people enjoy going to winter sports and learning to ski; ice rinks are crowded by people acquiring skill in skating; some people occupy their leisure by learning foreign languages. If the developed adult who finds his powers roughly sufficient for his needs continues to desire to learn, how much stronger must this impulse be in the child who finds his wishes and desires thwarted at every turn by ignorance and lack of skill?

One important difference in their position is that the adult knows how to obtain teaching, and what occupations are most likely to lead to the end he has in view. It is part of a child's ignorance that he does not know this, and the teacher's part is to provide him with the opportunities for this development of himself through the child's own purposes, and to show him the manner in which those opportunities are to be used.

The children of a French fishing village have quite a rich environment—sea, sand, rocks, open fields and boats. But no one has the time or thought to show them how to use it. The difference between the inert mischievous brats of the streets and the eager alert bands who march off to tap of drum under ecclesiastical escort is amazing. The child needs and welcomes guidance in the matter of self-development.

However, when once a child has been taught how to use his environment he can be left to continue along his own lines. The occupations of a child are slow and often incomprehensible to others. The able, well-taught child lives in his games, and the adult who

tries to import speed and definiteness is unwelcome. A child occupied in a harmless way should be left alone—he is thinking, inventing, devising, practising that particular power which is in need of development, and however silly his running about, making mud pies, or working out the plans for an engine of eternal motion may seem, these activities are probably more valuable to him than others thought out for him by the interfering adult.

It is here that school so often proves a cramping influence. Instead of waiting for development it starts the child on activities (or subjects) before he is ready for them, and continues them in steady routine long after he is tired of them.

When a child is ready for the activities of number or writing or reading, they are to him as "play," and he will then give to them the same concentrated attention, and show the same desire to master them that he has shown in his nursery tasks.

The same principle applies to methods as well as to subjects. The "Project" method, for example, will lose all its value unless by its matter and manner it engages the children's attention and delight, and appeals to the impulses and interest proper to their stage of development. In short, unless they can accept it as part of their "play" they will not "work" at it, and are probably right in their refusal.

## EXERCISES

- I.—Describe the first games of a small child, and say how far each is due to imitation and how far it is purely "natural."

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- 2.—What games would you teach to children? Describe the methods of instruction that you would use.
- 3.—What importance for the teacher has the theory that in its play the child recapitulates the history of the race?
- 4.—How far does a child prepare in play for its future life?

### BOOKS

Karl Groos	<i>The Play of Man.</i> <i>The Play of Animals.</i>
Miller	<i>The Child in Primitive Society.</i>
Stanley Hall	<i>Adolescence.</i> 1908. <i>Aspects of Child Life and Education,</i> 1921.
Sully	<i>Children's Ways.</i>
A. Gesell	<i>Infancy and Human Growth.</i>

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